CONTRACT AWARD	STATE OF ALASKA HQ, STATE EQUIPMENT FLEET (Contracting Authority) 2200 E. 42nd Avenue Anchorage, Alaska 99508 (907-269-0800)	CONTRACT AWARD NUMBER 1606559

ORDERING DEPARTMENT	COMMODITY CODE	DATE OF CONTRACT
HEADQUARTERS, STATE EQUIPMENT FLEET 2200 E. 42ND AVENUE ANCHORAGE, ALASKA 99508		6/5/06
	NUMBER & PERIOD OF RENEWAL OPTIONS NONE	PR NO./DATE ASSIGNED
	DATE INITIAL CONTRACT BEGINS 6/5/06	DATE INTIAL CONTRACT ENDS 6/4/09

CONTRACTOR ADDRESS OSHKOSH TRUCK CORPORATION 2307 OREGON STREET OSHKOSH WI 54902	GS VENDOR CODE:
	ISSUED IN ACCORDANCE WITH BID # SEF- 1023 DATED: 6/5/06
	PRICE ADJ. REQ. PRIOR TO EACH RENEWAL:
CONTACT NAME DONALD VERHOFF	CPI/PPI BASE INDEX POINTS & MO/YR:
	REVIEW DATE: RENEWALS EXPIRE (MO/YR): 6/4/2009
TELEPHONE NUMBER 920-235-9151	ESTIMATED VALUE OF INITAL TERM: REBID:

SEND INVOICES IN DUPLICATE TO: DOT&PF, STATE EQUIPMENT FLEET, 2200 E. 42ND AVENUE, ANCHORAGE AK 99508

NOTE: This order constitutes a binding commitment between the State and the contractor listed hereon. Unauthorized modification without the expressed prior approval of the contracting authority will result in a financial obligation on the contractor and/or unauthorized State personnel making the change.

DESCRIPTION

5-YEAR CONTRACT TO PURCHASE (AIP)
4,500 GALLON AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES

CONTRACTING OFFICER
CATHERINE DWYER

PHONE: (907) 269-0786

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SECTION

CONTRACTING AUTHORITY NAME & TITLE	SIGNATURE
LYNDA SIMMONS, CONTRACTING OFFICER III	

TELEPHONE NO.: 907-269-0793 FAX NO.: 907-269-0801

IMPORTANT 1. Contract award number and ordering department name must appear on all invoices and documents relating to this order.
2. The State is registered for tax free transactions under Chapter 32, IRS Code Registration No. 92-601185. Items are for the exclusive use of the State and not for resale.

SECTION I

STANDARD TERMS AND CONDITIONS

1.0 ACCESSORIES: When accessories are supplied, they must be certified to be compatible with the rest of the equipment. Certification will be written evidence satisfactory to the State that the accessories are compatible.

2.0 ALTERATIONS: The contractor must obtain the written approval from the Contracting Officer prior to making any alterations to the specifications contained in this contract. The State will not pay for alterations that are not approved in advance and in writing by the Contracting Officer.

3.0 AMENDMENTS: Contract terms shall not be waived, altered, modified, supplemented or amended without prior written approval of the Contracting Officer.

4.0 ASSIGNMENT: A contractor may not assign any portion of a contract unless authorized in advance and in writing by the Contracting Officer.

5.0 COMPLIANCE WITH ALL GOVERNMENT REGULATIONS: The contractor must comply with all applicable federal, state, and borough regulations, codes, and laws, and pay all applicable federal, state, and borough taxes, and is liable for all required insurance, licenses, permits, and bonds. Failure to comply with such requirements shall constitute a breach of contract and shall be grounds for contract cancellation. Damages or costs resulting from noncompliance shall be the sole responsibility of the contractor.

6.0 CONFLICT OF INTEREST: A person employed by the State of Alaska may not seek to acquire, be a party to, or possess a financial interest in, this contract if they are an employee of the administrative unit that supervises the award of this contract or they have the power to take or withhold official action to affect the contract.

7.0 CONTRACT PERIOD: From the date of award for five years (60 months). There are no options to renew.

8.0 DEFAULT: In case of contractor default, the State may procure the goods or services from another source and hold the contractor responsible for any resulting excess costs and may seek other remedies under law or equity. Alaska Statutes and Regulations provide for suspension and disbarment of non-responsible contractors.

9.0 DELIVERY: All deliveries shall be F.O.B. final destination point with all transportation and handling charges paid by bidder. Responsibility and liability for loss or damage shall remain with the contractor until final inspection and acceptance when responsibility shall pass to the State except as to latent defects, fraud and contractor's warranty obligations.

10.0 DISCONTINUED ITEMS: In the event an item is discontinued by the manufacturer during the life of the contract, another item may be substituted, provided that the Contracting Officer makes a written determination that it is equal or better than the discontinued item and provided that it is sold at the same price or less than the discontinued item.

11.0 DISPUTES: Any disputes arising out of this contract shall be resolved under the laws of Alaska. An appeal or any original action to enforce any provision of this agreement must be in the superior court for the First Judicial District of Alaska.

12.0 FORCE MAJEURE (Impossibility to perform): Neither party to this contract shall be held responsible for delay or default caused by acts of God and/or war, which is beyond that party's reasonable control. The State may terminate this contract upon written notice after determining such delay or default will reasonably prevent successful performance of the contract.

13.0 INDEMNIFICATION: The contractor shall indemnify, hold harmless, and defend the contracting agency from and against any claim of, or liability for error, omission or negligent act of the contractor under this agreement. The contractor shall not be required to indemnify the contracting agency for a claim of, or liability for, the independent negligence of the contracting agency. If there is a claim of, or liability for, the joint negligent error or omission of the contractor and the independent negligence of the contracting agency, the indemnification and hold harmless obligation shall be apportioned on a comparative fault basis. “Contractor” and “contracting agency”, as used within this and the following article, include the employees, agents and other contractors who are directly responsible, respectively, to each. The term “independent negligence” is negligence other than in the contracting agency’s selection, administration, monitoring, or controlling of the contractor and in approving or accepting the contractor’s work.

14.0 INSPECTIONS: Goods furnished under this contract are subject to inspection and test by the State at times and places determined by the State. If the State finds goods furnished to be incomplete or not in compliance with bid specifications, the State may reject the goods and require the contractor to either correct them without charge or deliver them at a reduced price, which is equitable under the circumstances. If the contractor is unable or refuses to correct such goods within a time deemed reasonable by the State, the State may cancel the order in whole or in part. Nothing in this paragraph shall adversely affect the State's rights as buyer, including all remedies and rights granted by Alaska statutes.

15.0 INSURANCE:

15.1 Without limiting the contractor's indemnification, it is agreed that the contractor shall purchase at its own expense and maintain in force at all times during the performance of services under this agreement the following policies of insurance. Where specific limits are shown, it is understood that they shall be the minimum acceptable limits. If the contractor's policy contains higher limits, the state shall be entitled to coverage to the extent of such higher limits. Certificates of Insurance must be furnished to the Contracting Officer prior to beginning work and must provide for a 30-day prior notice of cancellation, non-renewal or material change of conditions. Failure to furnish satisfactory evidence of insurance or lapse of the policy is a material breach of this contract and shall be grounds for termination of the contractor's services. All insurance policies shall comply with, and be issued by insurers licensed to transact the business of insurance under AS 21.

15.2 Proof of insurance is required for the following:

15.2.1 Workers' Compensation Insurance: The contractor shall provide and maintain, for all employees engaged in work under this contract, coverage as required by AS 23.30.045, and; where applicable, any other statutory obligations including but not limited to Federal U.S.L. & H. and Jones Act requirements. The policy must waive subrogation against the State.

15.2.2 Commercial General Liability Insurance: covering all business premises and operations used by the contractor in the performance of services under this agreement with minimum coverage limits of $300,000 combined single limit per occurrence.

15.2.3 Commercial Automobile Liability Insurance: covering all vehicles used by the contractor in the performance of services under this agreement with minimum coverage limits of $300,000 combined single limit per occurrence.

15.3 Failure to supply satisfactory proof of insurance within the time required will cause the State to declare the contractor non-responsive and to reject the contract.

16.0 ITEM UPGRADES: The State reserves the right to accept upgrades to models on the basic contract when the upgrades improve the way the equipment operates or improve the accuracy of the equipment. Such upgraded items must be at the same price as the items in the basic contract.

17.0 NEW EQUIPMENT: Equipment offered must be new equipment. New equipment means equipment that is currently in production by the manufacturer and is still the latest model, edition or version generally offered. The equipment must be warranted as new by the manufacturer and may not have been used for any purpose, other than display (not demonstration), prior to its sale to the State. The State will not accept remanufactured, used or reconditioned equipment. It is the contractor's responsibility to ensure that each piece of equipment delivered to the State complies with this requirement. A contract's failure to comply with this requirement will cause the State to seek remedies under breach of contract.

18.0 PAYMENT: Payment for agreements under $500,000 for the undisputed purchase of goods or services provided to a State agency, will be made within 30 days of the receipt of a proper billing or the delivery of the goods or services to the location(s) specified in the agreement, whichever is later. A late payment is subject to 1.5% interest per month on the unpaid balance. Interest will not be paid if there is a dispute or if there is an agreement, which establishes a lower interest rate or precludes the charging of interest.

19.0 QUANTITIES: The State reserves the right to reduce or increase the quantity of items ordered under this contract. .

20.0 SEVERABILITY: If any provision of this contract is declared by a court to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected.

21.0 SHIPPING DAMAGE: The State will not accept or pay for damaged goods. The contractor must file all claims against the carrier(s) for damages incurred to items in transit from the point of origin to the ultimate destination. The State will provide the contractor with written notice when damaged goods are received.

22.0 STANDARD AND SPECIAL TERMS AND CONDITIONS: The terms and conditions of this section are standard to State of Alaska, Department of Transportation and Public Facilities, Statewide Equipment Fleet contracts for the purchase of goods. There may also be other special terms and conditions which apply only to this contract. In the event of a conflict between the Standard and Special Terms and Conditions, the Special Terms and Conditions take precedence.

23.0 SUCCESSORS IN INTEREST: This contract shall be binding upon successors and assigns.

24.0 SUITABLE MATERIALS: All materials, supplies or equipment offered by a contractor shall be new, unused, of recent manufacture, and suitable for the manufacturer's intended purpose unless the specifications allow for used, rebuilt or remanufactured equipment.

25.0 TAXES: Prices quoted in bids must be exclusive of federal, state, and local taxes. If the contractor believes that certain taxes are payable by the State, the contractor may list such taxes separately, directly below the bid price for the affected item. The State is exempt from Federal Excise Tax because articles purchased are for the exclusive use of the State of Alaska.

26.0 WARRANTY: Unless otherwise stated, all equipment shall be new and current model and shall carry full factory warranties. The contractor warrants all goods delivered to be free from defects in labor, material and manufacture and to be in compliance with contract specifications. All implied or expressed warranty provisions of the Uniform Commercial Code apply. All warranties shall be for the benefit the State.

SECTION II

SPECIAL TERMS AND CONDITIONS

NOTE: This section will be used for Terms and Conditions that are "special" and/or unique to a particular contract.

1.0 DELIVERY:

1.1 **Pre-delivery service:** Prior to delivery, each vehicle, piece of equipment or attachment shall be serviced and inspected by the dealer or his agent. A certification of this inspection must include the following (as applicable to the type of equipment):

1.1.1 Dealer and vehicle identification.

1.1.2 Check-off of service and inspection performed including a list of all fluids including type weight and specification that are in the equipment as delivered for all fluid compartments.

1.1.3 The vehicle's crankcase, differential and transmission, and other fluid compartments shall be filled to the manufacturer's recommended capacity.

1.1.4 Fuel tank shall be filled to at least register a minimum ¼ full on the fuel gauge, unless restricted by the commercial carrier, when the vehicle arrives at the delivery location.

1.1.5 The vehicle shall be clean and free from defects when delivered and should be ready for immediate and continued use upon delivery.

1.1.6 Units delivered in an incomplete state, or which have deficiencies per the specification, are subject to the damage charges as noted in paragraph 4.0 below.

1.2 **Delivery Receipt:**

1.2.1 A delivery receipt will be required for the delivered unit. The receipt must be filled out by the vendor, and acknowledged by state receiving personnel by signature and date of actual receipt of equipment. One copy of this delivery receipt is to be given to the state-receiving agency. The original shall accompany the vendor's invoice to support and properly identify the vehicle delivered.

1.2.2 Vendors are cautioned and advised that such delivery forms or other receiving type documents will not in any way be construed to mean the state has formally and fully accepted unit(s) referenced thereon as complete and meeting every specification set forth. The Regional Equipment Manager is to be contacted regarding delivery coordination and contacts.

1.2.3 Under no conditions will warranty documents be presented at time of delivery for signature. Only the Contracting Officer or designee may sign warranty documentation.

2.0 LINE SHEETS/BILL OF MATERIALS:

2.1 It is required within 30 days after delivery that the contractor provide a comprehensive listing of all components used to assemble the unit.

2.2 This includes any components installed by the manufacturer or any subcontractor or the contractor.

2.3 Information will include at a minimum, when available, make, model serial number on items such as engines, transmissions, axles, tires, bodies, plows, snow wings, belly blades, cranes, etc. The listings will be specific to each piece of equipment and will be provided on an individual CD for each unit delivered.

2.3.1 On after-market items that are installed, part numbers with descriptions, such as, but not limited to hydraulic fittings, are to be provided.

2.4 A minimum of four (4) CD's per unit are to be provided and marked with the make, model, and last main numbers of the units serial number or State PO number.

3.0 F.O.B. POINT:

3.1 The F.O.B. point for all items purchased under this contract is planned for Anchorage International Airport. Ownership of and title to the ordered items remains with the contractor until the items have been delivered at their final destination and are accepted by the State.

3.1.1 On this contract, the unit(s), when shipped to or through Anchorage, is(are) to be shipped on Totem Ocean Trailer Express, under deck, to protect it from ocean salt spray.

3.2 Please refer to Section III – Price Schedule for F.O.B. point.

4.0 DAMAGES FOR LATE DELIVERY AND NON-CONFORMING GOODS:

4.1 Time is of the essence in this contract. The contractor is expected to deliver goods that conform in all material respects to the contract specifications on or before the date provided therein, as may be amended by written agreement of the parties.

4.2 In the event that the goods are delivered late or in the event that the goods do not conform in all material respects to the contract specifications, the State shall be entitled to offset against the Contract Price, as liquidated damages and not as a penalty, an amount equal to **$25.00** per day multiplied by the number of days elapsing between the delivery date provided in the specifications and the date that conforming goods are delivered to the State. The number of days for which liquidated damages shall apply shall include, in the case of non-conforming goods, the time reasonably necessary for the State to inspect the goods.

4.3 These liquidated damages represent a reasonable estimate of amounts necessary to compensate the State for loss of use of the goods during the period in which the goods would have been available to the State if conforming goods had been timely delivered.

5.0 WARRANTY:

5.1 Engine, Transmission and Suspension System:

5.1.1 Full (100%) Parts and Labor Warranty Coverage for 60-months (5 years), from the date the unit is placed into service.

5.2 Water Pump:

5.2.1 Full (100%) Parts and Labor Warranty Coverage for 24-months (2 years), from the date the unit is placed into service.

5.3 Water/Foam Tank:

5.3.1 Full (100%) Parts and Labor Warranty Coverage for 120-months (10 years), from the date the unit is placed into service.

5.4 Base Machine:

5.4.1 Unless otherwise stipulated by this ITB, the successful bidder will provide a three-year (36-month) two (2) part warranty.

5.5 **Full (100%)** Warranty Coverage includes all cost of labor, parts, freight, transportation, per diem, travel, lubricants, miscellaneous cost, etc., to place the unit in like-new condition.

5.6 **Part One:**

5.6.1 Full (100%) Parts and Labor Warranty Coverage of all components for 12 months (year one), from the date the unit is placed in service at the assigned location.

5.7 **Part Two:**

5.7.1 Additional Warranty Coverage for the succeeding 24 months (years two and three) to be 100% parts only (or component exchange) for all major power and drive train components, including freight, to place the unit back into good operating condition, from the date the unit is placed in service.

5.7.2 Major power and drive train components include the engine, transmission, torque converter, differential(s), planetary drives, main hydraulic pump, and any other major components recognized in the equipment industry as belonging to the power or drive train.

5.7.3 NOTE: Also refer to Section III – Price Schedule for optional warranty requirements.

5.8 Should the manufacturer's standard warranty exceed the minimum State warranty requirements, the manufacturer's warranty will run in conjunction with and enhance the State's warranty, then continue for the remainder of its term.

5.9 The contractor is responsible for all freight, transportation, and per diem. Per diem and mileage will be paid at the applicable rate for State employees. Per Diem and mileage will commence when travel status begins and will continue until return travel status is completed. Air transportation will be reimbursed for actual cost for coach (economy class). The state will not pay a contractor's hourly shop rate during travel or Per Diem status.

5.10 If the State receives from any manufacturer or supplier additional or extended warranty on the whole or any component of the unit, in the form of time and/or mileage, including any pro rata arrangements, or the manufacturer generally extends to fleet customers a greater or extended warranty coverage, the state shall receive corresponding warranty benefits.

5.11 **General Warranty Requirements for all Equipment:**

5.11.1 **Warranty Exceptions:**

5.11.1.1 For clarification, warranty does not apply to normal wear and tear or maintenance items, accident damages, misuse of equipment or failure to operate or maintain equipment as prescribed by vendor/manufacturer.

5.11.2 **Warranty on Attachments:** Same as Standard Warranty Package with exception to VHF radios and intercom systems, which are to be manufacturer's standard warrantee.

5.11.3 **In-Service Date:**

5.11.3.1 Warranty on vehicles not placed in service immediately upon receipt because of time lag to construct body components and/or installation of special equipment, or due to seasonal usage or other delay, shall be warranted from the date the vehicle is placed in service. The receiving agency shall notify the vendor/manufacturer in writing of the actual "in service" date. Notification of the requirement for delayed warranty will be provided on delivery orders whenever possible.

5.11.4 **Authorized Warranty Dealer (Contractor) and Subcontractor:** For the purpose of this contract, the contractor must meet the following applicable requirements:

5.11.4.1 Contractor must:

5.11.4.1.1 possess a current Alaska Motor Vehicle Dealer License pursuant to AS 08.66.010 through AS 08.66.090, when offering motor vehicles, trailers or semi-trailers, and;

5.11.4.1.2 be a manufacturer(s) authorized warranty service dealer for the unit, and;

5.11.4.1.3 have the capability of providing warranty servicing and repair work within the State of Alaska, with an authorized warranty repair facility in Anchorage, as a minimum.

5.11.4.2 Contractor, if appropriate, shall submit the name, address, Alaska business license of any subcontractor who will provide the warranty servicing and repair work referenced in paragraph 5.1 above. The contractor must also provide contractual documentation or agreements with the subcontractor insuring the state that the subcontractor will provide complete contract performance on behalf of the contractor as set forth in this contract and verification that the work provided will maintain manufacturer's warranty requirements.

5.11.4.2.1 Approval of all subcontractors must take place prior to the bid opening.

5.11.4.2.2 The use of a subcontractor does not exclude the provisions as noted in paragraphs 5.2.4.1, and subsequent paragraphs, as requirements to the contractor.

5.11.5 **Warranty Claims:**

5.11.5.1 Warranty will be provided at the unit's assigned (in-service) location. Because of the remote location of some equipment it is not always practical to deliver equipment to authorized warranty repair facilities. In these cases, the vendor may perform warranty work at the state's location or, the State of Alaska, at its discretion, reserves the right to perform the warranty work and be reimbursed by the vendor.

5.11.5.2 The State of Alaska has established a warranty procedure whereby the vendor is to be notified via letter, telex, fax, etc. that warranty work needs to be performed. If time is of the essence, a telephone call confirmed by one of the above written procedures may be utilized. The vendor must notify the state <u>immediately</u> that it will <u>begin to perform</u> the warranty work at the equipment location within 48 hours from receipt of written notification. The State may, at its discretion, proceed to make warranty repairs with its own work force in the case of emergency situation or to preclude excessive downtime (greater than 48 hours).

5.11.5.3 Failure to notify the State, that the vendor intends to begin to perform warranty work promptly under this paragraph, by the end of the business day following the states notification that work is required to be performed, is considered a contractual breach.

5.11.6 The vendor will be invoiced for required warranty work performed by the state. The shop rate to be charged for warranty work performed by the state will be **$81.00** per hour. Labor hours to be charged will be in accordance with appropriate flat rate manuals. If flat rate manuals do not cover the labor operation, actual repair time will be used. Warranty work performed by state shop personnel at locations where no shop personnel are permanently stationed may be subject to travel expenses incurred involving those warranty repairs.

5.11.7 Factory Recall:

5.11.7.1 Nationwide factory recall or product update programs are the responsibility of the vendor and/or manufacturer. The State will attempt to bring affected equipment to an authorized repair facility. However, because of the remoteness of some equipment this is not always practicable or economical. In such cases, factory recall and modification work will be handled the same as warranty work. Factory recall notices sent to the state should, in addition to serial number, include model, year, and dealer from whom purchased.

5.11.8 **Hazardous Material:**

5.11.8.1 Due to concerns about liability resulting from hazardous materials being left at the work site on State of Alaska property, effective immediately no vendors will be allowed to use the State of Alaska rural airport facilities to perform warranty work unless they agree and sign a letter of intent stating that all waste products including oils, coolant and garbage will be removed from the work site. Vendors should note that in some village locations other suitable facilities might be available for rent from local residents or village authority.

6.0 REPAIR ORDERS AND DOCUMENTATION:

6.1 Any work performed by the contractor or approved subcontractor, whether warranty or any other work on a piece of equipment purchased under this contract, will require a copy of the repair order, any invoices showing parts and commodities including oils and types used.

7.0 PUBLICATIONS:

7.1 Publications are to be received by the State of Alaska no later than 10 days after receipt of the unit. Custom manuals may be delivered no later than 90 days after receipt of the unit. Delivery will not be considered complete until the publications for each unit have been received by the State of Alaska. Note: Publications, when required, will be ordered on the same Purchase Order as the unit itself.

7.1.1 All manuals are to be pre-assembled in factory binders prior to delivery.

7.1.2 Compact discs are acceptable in lieu of paper for service and parts manuals.

7.2 **Service Manuals:**

7.2.1 Complete set(s) (compact disc or books) to include applicable information covering prime unit and attachments:

7.2.2 Body, chassis, and electrical

7.2.3 Engine, transmission, and differential(s) (service and rebuild)

7.2.4 Electrical and Vacuum troubleshooting

7.2.5 Wiring diagrams

7.2.6 Service specifications

7.2.7 Engine/emission diagnosis

7.3 **Parts Manuals:**

7.3.1 Complete set(s) (compact disc or paper books) including hitch and all updates. If updates are not provided during the two-year warranty period, the State will order them from the manufacturer and bill the contractor for the full cost, including shipping.

7.3.2 Parts manuals are to be customized by serial number.

7.4 **Operator's Manuals:** Complete set(s) to include prime unit and attachments.

7.5 **Quantities:** As per Section III – Price Schedule.

7.6 **Manuals:** To be delivered to, and receipt signed by person(s) as noted on the Purchase Order.

7.7 **Service Bulletins, Etc.:** The contractor must provide appropriate service bulletins, technical support bulletins, service letters, product support bulletins, and/or any other information type notifications that are sent out to the vendor or used by the manufacturer in the maintenance and report of the vehicle, equipment or attachments being provided. The intent of this clause is that the State of Alaska be provided notification of any and all changes or improvements that may affect the maintenance, reliability, longevity, and safety of our equipment. This information will be provided as soon as possible to person(s) as noted on the Purchase Order.

8.0 STATEMENT OF ORIGIN: The contractor will be required to furnish a Manufacturer's Statement of Origin for Automotive or Non-Automotive rolling stock for each unit. All such documents shall be forwarded to:

DOT&PF, HQ State Equipment Fleet

2200 E. 42nd Avenue Room #317

Anchorage, Alaska 99508

9.0 WEIGHT VERIFICATION SLIPS: If required in the Price Schedule, a weight scale ticket of the completed unit will be included with the Statement of Origin.

10.0 INSPECTIONS:

10.1 The State's inspection of all materials and equipment upon delivery is for the sole purpose of identification. Such inspection shall not be construed as final or as acceptance of the materials or equipment if materials or equipment do not conform to contract requirements. If there are any apparent defects in the materials or equipment at the time of delivery, the State will promptly notify the contractor thereof. Without limiting any other rights of the State, The State at its option, may require the contractor to:

10.1.1 Repair or replace at contractor's expense, any or all of the damaged goods,

10.1.2 refund the price of any or all of the damaged goods, or

10.1.3 accept the return of any or all of the damaged goods.

10.2 Costs of remedying all defects, indirect and consequential costs of correcting same, and/or removing or replacing any or all of the defective materials or equipment will be charged against the contractor.

11.0 PRICE:

11.1 **Price Guarantee:** The contractor is responsible to maintain prices under the contract firm for 180 days after bid opening. All price increases or decreases must remain firm for the following 180 days.

11.2 **NO RETROACTIVE PRICE INCREASES WILL BE ACCEPTED**.

11.3 Price adjustments, increases or decreases, for subsequent orders, may be made by providing the Contracting Officer satisfactory evidence that all of the following conditions exist:

11.3.1 The increase is a result of the increased cost at the manufacturer's level and not costs under the contractor's control, and that;

11.3.1.1 The increase will not produce a higher profit margin for the contractor than that on the original contract, and that;

11.3.1.2 The increase affects only the item(s) that are clearly identified by the contractor.

11.3.1.3 Satisfactory forms of the evidence of the above facts may include a certified invoice from the manufacturer, or an affidavit from an independent professional price-tracking firm that is recognized by the industry as reputable and knowledgeable. The contractor must be able to show the difference between the prior year's price and the current difference in the price being requested.

11.4 **Price Decreases:** During the period of the contract, the contractor must pass on to the state all price decreases, such as fleet rebates. A contractor's failure to adhere strictly and faithfully to this clause will be considered a material breach of contract. The state reserves the right to cancel the contract if the contractor fails to properly perform the duties set out herein.

12.0 COOPERATIVE PURCHASING:

12.1 All requests to cooperatively purchase, by qualified political subdivisions, from the resulting contract shall be approved by the Contracting Officer.

12.2 At no time may the contractor change the terms and conditions, alter the price to another entity, which differs from the contractual price, nor charge undisclosed administrative fees to allow cooperative purchasing.

12.3 The contractor shall charge, and subsequently reimburse to the State after receipt and payment by purchaser, a users fee of 2% or $1,000.00, whichever is less, for each unit ordered by a qualifying political subdivision. Any administrative fee resulting to the contractor in fulfillment of this requirement must be included in the bid price of the offered unit.

13.0 MANUFACTURER'S REBATE (INCENTIVES): In any circumstance during or prior to completion of the contract, whereupon the State of Alaska becomes eligible to receive a rebate for any vehicle purchased under this contract, it shall be the CONTRACTOR'S responsibility to inform the Contracting Officer in writing and to advise the procedures for obtaining such rebates.

14.0 REPLACEMENT PARTS:

14.1 The State of Alaska shall expect the dealer or manufacturer to provide replacement wear parts at their Anchorage (as a minimum Alaska location) authorized warranty facility within seven (7) days of order. All other parts must be available within ten (10) working days.

14.2 Back order procedures: Back orders are acceptable; however, the ordering shop shall be appraised at time of original orders as to the expected delay in delivery.

14.3 Warranty: All products supplied by the contractor shall be warranted against defects in materials and workmanship for a minimum of 90 days, commencing at the time of installation as long as the installation is within 12 months of purchase. The cost of any defective product and the labor required to replace the defective product shall be the obligation of the contractor.

14.3.1 If the manufacturer's warranty exceeds the stated warranty then manufacturer's warranty supersedes.

14.3.2 Parts Return: Within 12 months of purchase, the State is to be allowed to return new, parts with full refund, less shipping charges.

14.3.3 Invoicing: Full description of item is required on all invoices, packing lists and billings.

15.0 BRAND NAME SPECIFICATION: For purposes of this contract, certain vehicle accessories are specifically identified by brand name and model/part number. Only the listed brand name and model/part numbers are acceptable. Substitutes shall not be allowed.

16.0 ADDITIONS OR DELETIONS: The State reserves the right to add or delete items, agencies or locations as determined to be in the best interest of the State. Added items, agencies or locations will be related to those on contract and will not represent a significant increase or decrease in size or scope of the contract. Such additions or deletions will be documented via mutual agreement, will be at prices consistent with the original bid price margins, and will be evidenced by issuance of a written contract change notice from the Contracting Officer.

17.0 CONTRACT ADMINISTRATION: The administration of this contract, including any/all changes, is the responsibility of the Contracting Officer, HQ State Equipment Fleet.

18.0 PROPRIETARY INFORMATION AND STATEMENTS OF CONFIDENTIALITY:

18.1 Except as set forth in this provision, all information in all bids will be made public under AS 36.30.530 not later than the time of issuance of a notice of intent to award.

18.2 If the offeror submits information considered by it to constitute a trade secret or proprietary data, such information may be expressly designated as such, and must be accompanied by the offeror's certification that (1) the information has consistently been maintained by its owner as a trade secret or as proprietary information, (2) the owner of the information has taken due care to protect it from release to non-privileged persons, and (3) to the best knowledge of the offeror, the information has not lost its status as trade secret or proprietary information, whether by lack of diligent protection, release to any non-privileged person or otherwise.

18.3 **Absence of such certification, any claim of confidentiality will be ignored, and the contractor may not hold any reasonable expectation of confidentiality.**

18.4 Any information so certified will be held confidential so long as the contracting officer concurs that it constitutes a trade secret or proprietary data, and deems it not critical to determination of the price, quantity, or delivery terms bid, or the responsiveness of the bid.

18.5 By submission of a bid, the offeror consents to the contracting officer's exercise of reasonable judgment as to concurrence with any assertion of confidentiality, and waives any and all claims for release of information that the contracting officer reasonably deems not confidential notwithstanding a certified assertion of confidentiality.

18.6 A certified assertion of confidentiality in which the contracting officer concurs, with respect to information the contracting officer deems critical to determination of the price, quantity, or delivery terms bid, or the responsiveness of the bid, will cause the bid to be rejected as a non-responsive bid.

19.0 TRADE RESTRICTION CLAUSE (9 CFR Part 30.13FAA Order 5100.38)

19.1 The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

19.1.1 is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

19.1.2 has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

19.1.3 has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

19.2 Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

19.3 Further, the contractor agrees that, the contract will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

19.4 The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

19.5 This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

19.6 Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

19.7 This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

20.0 CIVIL RIGHTS ACT OF 1964, TITLE VI – CONTRACTOR CONTRACTUAL REQUIREMENTS (49 CFR Part 21 AC 150/5100-15)

20.1 During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

20.1.1 **Compliance with Regulations.** The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

20.1.2 **Nondiscrimination.** The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

20.1.3 **Solicitations for Subcontracts, Including Procurements of Materials and Equipment.** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

20.1.4 **Information and Reports.** The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

20.1.5 **Sanctions for Noncompliance.** In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

20.1.5.1 Withholding of payments to the contractor under the contract until the contractor complies, and/or

20.1.5.2 Cancellation, termination, or suspension of the contract, in whole or in part.

20.1.6 **Incorporation of Provisions.** The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

21.0 AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS (Airport and Airway Improvement Act of 1982, Section 520, Title 49 47123,AC 150/5100-15, Para. 10.c)

21.1 The contractor assures that it will comply with pertinent statutes, Executive orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

22.0 DISADVANTAGED BUSINESS ENTERPRISES (49 CFR Part 26)

22.1 **Contract Assurance (§26.13)** - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

22.2 **Prompt Payment (§26.29)** - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than ***30*** days from the receipt of each payment the prime contractor receives from the State of Alaska**.** The prime contractor agrees further to return retainage payments to each subcontractor within [specify the same number as above] days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Contracting Officer This clause applies to both DBE and non-DBE subcontractors.

23.0 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES (49 CFR Part 20, Appendix A)

23.1 No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.

23.2 If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the contractor shall complete and submit Standard Form-LLL, “Disclosure of Lobby Activities,” in accordance with its instructions.

24.0 ACCESS TO RECORDS AND REPORTS (49 CFR Part 18.36(i),FAA Order 5100.38)

24.1 The contractor shall maintain an acceptable cost accounting system. The contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

25.0 ENERGY CONSERVATION REQUIREMENTS (49 CFR Part 18.36 & Public Law 94-163)

25.1 The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

26.0 BREACH OF CONTRACT TERMS (49 CFR Part 18.36)

26.1 Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

27.0 RIGHTS TO INVENTIONS (49 CFR Part 18.36(i)(8) & FAA Order 5100.38)

27.1 All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

28.0 TRADE RESTRICTION CLAUSE (49 CFR Part 30.13 & FAA Order 5100.38)

28.1 The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

28.1.1 is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

28.1.2 has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

28.1.3 has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

28.2 Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

28.3 Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

28.4 The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

28.5 This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

28.6 Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

28.7 This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

29.0 TERMINATION OF CONTRACT (49 CFR Part 18.36(i)(2) & FAA Order 5100.38)

29.1 The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.

29.2 If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.

29.3 If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.

29.4 If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.

29.5 The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

30.0 CERTIFICATION REGARDING DEBAREMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION (49 CFR Part 29 & FAA Order 5100.38)

30.1 The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

31.0 CLEAN AIR AND WATER POLLUTION CONTROL (49 CFR Part 18.36(i)(12) & Section 306 of the Clean Air Act & Section 508 of the Clean Water Act)

31.1 Contractors and subcontractors agree:

31.1.1 That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities;

31.1.2 To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued there under;

31.1.3 That, as a condition for the award of this contract, the contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities;

31.1.4 To include or cause to be included in any construction contract or subcontract which exceeds $100,000 the aforementioned criteria and requirements.

32.0 ALASKA BIDDERS PREFERENCE: For the purpose of this ITB, Alaska bidders will <u>not</u> receive any preferences as noted in Section II, Standard Terms and Conditions, paragraph 2 in its entirety.

33.0 BUY AMERICAN CERTIFICATE:

33.1 By submitting a bid/proposal under this solicitation, except for those items listed by the offeror below or on a separate and clearly identified attachment to this bid/proposal, the offeror certifies that steel and each manufactured product, are produced in the United States, as defined in the clause Buy American - Steel and Manufactured Products for Construction Contracts) and that components of unknown origin are considered to have been produced or manufactured outside the United States.

33.2 Offerors may obtain from the owner a listing of articles, materials and supplies excepted from this provision.

33.3 **IF THERE ARE NO EXCEPTIONS, WRITE "NONE".**

Product	***Country of Origin***
NONE	

34.0 BUY AMERICAN PREFERENCES (Section 9129 of the Aviation Safety and Capacity Expansion Act of 1990 & Title 49 U.S.C. Chapter 501)

34.1 The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program. The following terms apply:

34.1.1 Steel and manufactured products. As used in this clause, steel and manufactured products include (1) steel produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in subparagraphs b. (1) or (2) shall be treated as domestic.

34.1.2 Components. As used in this clause, components means those articles, materials, and supplies incorporated directly into steel and manufactured products.

34.1.3 Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.

34.2 The successful bidder will be required to assure that only domestic steel and manufactured products will be used by the Contractor, subcontractors, material men and suppliers in the performance of this contract, except those:

34.2.1 that the US Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality;

34.2.2 that the US Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest; or

34.2.3 that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

34.3 **To evaluate compliance with the above, bidder is to provide the following with their bid:**

34.3.1 Location of final assembly:

Company Name: Oshkosh Truck Corporation

Physical Address: 2307 Oregon Street

City, State & Zip Code: Oshkosh, WI 54902

34.4 Statement of final assembly:

34.4.1 Provide a written statement of what constitutes final assembly for this item (or items) being offered. Refer to separate attached letter if necessary.

Completion of vehicle to meet customer specifications.

34.5 **Percentage of U.S. Components:**

Provide a list of components meeting the requirement of "steel and manufactured products" listed above along with their dollar value, and summarize according to the following example to affirm that a minimum of 60 percent of all components are manufactured or produced in the United States.

Example:

U.S. Manufactured Component	Cost
Engine	$20,000.00
Transmission	10,000.00
Tires	4,000.00
Total Cost of U.S. Manufactured Components	$34,000.00
Cost of item bid =	$50,000.00

Percentage of U.S. Components = $34,000 / $50,000 = $68%

Bidder's Affirmation of U.S. Componentry:
(Attach additional sheets if necessary)

U.S. Manufactured Component	Cost
1. PROPRIETARY AND CONFIDENTAL	$_____
2. _____	$_____
3. _____	$_____
4. _____	$_____
5. _____	$_____
6. _____	$_____

Total Cost of U.S. Manufactured components. $ _____

Cost of item bid…….. $ _____

Percentage of U.S. Components…… > 60 %

SECTION III

BID SCHEDULE

LOT #1

Item #	Unit	Description	Total $ Amount
1.a	ea.	4,500 Gallon Aircraft Rescue and Fire Fighting Vehicle (ARFF), equipped to carry and discharge a minimum of: 4,500 gallons of water, 540 gallons of concentrated liquid foam agent, and to include the required tools and auxiliary equipment. Warranty to be as per Section II– Special Terms and Conditions. Color to be manufacturer's Lime Green. Per Specification #195-4500-ANC, contained herein.	**$936,434.00**

State Class #195

ARFF Vehicle - Year, Make and Model Offered:

2007 OSHKOSH STRIKER 4500

OPTIONAL ITEMS (Not included in above pricing):

1.b	ea.	Eagle Eye DEVS system: (As per Specification Item 59.4.7.7)	**$ 65,209.00**
1.c	ea.	Akron 500 GPM Auto-Oscillating Bumper Turret: (In lieu of Feecon bumper turret described in Specification Item 83.0)	**($ 2,372.00)**
1.d	ea.	Factory maintenance training at Anchorage Airport: (As per Specification Item 137.0)	**$ 14,350.00**
1.e	ea.	High and Low Flow Low-Attack Turret as described in Specification Item 138.0: (In lieu of the bumper turret as described in Specification Item 83.0)	**$ 33,559.00**
1.f	ea.	Cost to incorporate a Dry-Chem Nozzle into the High and Low Flow Low-Attack Turret nozzle as described in Specification Item 138.0.	**$ 4,477.00**

1.g	ea.	High Reach Extendible Turret, as described in Specification Item 139.0: (In lieu of the specified roof turret described in Specification Item 84.0)	**$ 194,051.00**
1.h	ea.	Cost to supply piping, valving and controls for a Hydro-Chem nozzle on the optional High Reach Extendible Turret (As described in Specification Item 139.0). The dry chemical agent shall discharge through a hydro-chem nozzle combined with the volume water/foam nozzle. Supply to the nozzle shall be with a full flow 1½ (1.5) inch piping to allow a minimum flow rate of 12 pounds per second throughout the full range of motion.	**$ 10,923.00**
1.i	ea.	Cost to supply piping, valving and controls for a Halotron I discharge on the optional High Reach Extendible Turret (described in Specification Item 139). The discharge of Halotron agent is required through the piercing applicator of the elevated waterway at a minimum discharge rate of five (5) pounds per second. Simultaneous discharge of both the Halotron handline and the piercing applicator while maintaining the specified discharge rates is not required or recommended. The system shall be set up for an efficient operation using one discharge at a time.	**$ 7,227.00**
1.j	ea.	Dry Chemical System (As per Specification Item 140)	**$ 22,271.00**
1.k	ea.	Halotron Agent System (As per Specification Item 141)	**$ 35,048.00**
1.L	ea.	Diagnostic Equipment. (As per Specification Item 142)	**$ 5,077.00**
1.m	ea.	Air hose reel in upper forward compartment on the left side, equipped with 150 foot of 3/8 inch hose. (As per Specification Item 142)	**$ 1,640.00**
1.n	ea.	Air hose reel in upper forward compartment on right side, equipped with 150 foot of 3/8 inch hose. (As per Specification Item 142)	**$ 1,640.00**
1.o	ea.	Service, Parts and Operator Manuals: Complete set delivered to: Anchorage International Airport, Attn: Dan Frisby, 5740 Dehavilland Ave, Anchorage, Alaska 99502 (As per Section III – Special Terms and Conditions, paragraph 7.0)	**$ 570.00**

FOB POINT: Anchorage International Airport (ANC)
5740 Dehavilland Avenue
Anchorage, Alaska 99502

WEIGHT VERIFICATION SLIP: A shipping weight scale ticket of the completed unit shall be included with the Statement of Origin. Per Section III – Special Terms and Conditions, Paragraph 7.

Required Delivery: Not later than 365 days ARO.

Offered Delivered Time: **365** Days ARO.

ORDERING OF ADDITIONAL UNITS

The following information was requested; it was not required and was not used in awarding the contract. A PRICE ESCALATION OF 4% WILL APPLY FOR ORDERS RECEIVED AFTER OCTOBER 1 OF EACH YEAR.

Lot #1, State Class #195-4,500 Gallon ARFF Vehicle.

Price for each additional unit, up to six (6), (as per Section I, Paragraph 1.3):

Item 1.a ---------- $_____

Option Item 1.b ---------- $_____

Option Item 1.c ---------- $_____

Option Item 1.d ---------- $_____

Option Item 1.e ---------- $_____

Option Item 1.f ---------- $_____

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Option Item 1.h ---------- $_____

Option Item 1.i ---------- $_____

Option Item 1.j ---------- $_____

Option Item 1.k ---------- $_____

Option Item 1.L ---------- $_____

Option Item 1.m ---------- $_____

Option Item 1.n ---------- $_____

Option Item 1.o ---------- $_____

(FOB Anchorage International Airport)

SECTION IV

SPECIFICATIONS

SPECIFICATION #195-4500-ANC
4,500 Gallon Aircraft Rescue
And Fire Fighting Vehicle
May 08, 2006

GENERAL SPECIFICATION:

It is the intent of these specifications to describe the requirements necessary to supply a well-designed, self-contained, properly engineered diesel powered Aircraft Rescue and Fire Fighting (ARFF) vehicle. Terms with meanings unique or specifically related to the ARFF vehicle design, construction, and performance requirements are contained in Appendix 1 of the FAA Advisory Circular 150/5220-10C (FAA-10C). The unit shall be new and unused.

The ARFF vehicle shall consist essentially of a four (4) person crew cab on an 8x8, custom or commercial chassis with single tires. It is to be all-wheel drive, single engine diesel powered, and with an automatic transmission.

The fire-fighting package shall include a water tank with a minimum capacity of 4,500 gallons. The unit will also carry a liquid foam agent, dry chemical (when requested), hose, and rescue tools.

This specification is intended to outline the technical specification requirements for an ARFF vehicle in accordance with FAA-10C and the NFPA-414 Standard for aircraft rescue and firefighting vehicles. Terms with meanings unique or specifically related to the ARFF vehicle design, construction, and performance requirements are contained in Appendix 1 of the FAA-10C.

Vehicles offered in the bid process shall conform in all respects to the requirements as set forth in the most current Federal Aviation Administration Advisory Circular No. 150/5220-10C. The referenced advisory circular (hereinafter referred to as the “FAA-10C”) contains the performance standards, construction, and testing requirements for this type of vehicle.

In addition to the basic requirements of the referenced advisory, the following "Sponsor Election of ARFF Vehicle Subsystem Components" is made for inclusion in the vehicle price. The vehicle and all items listed under Table A3-1 shall be bid FOB Anchorage International Airport.

APPLICATION:

This specification covers a four-axle 8x8 all-wheel drive, diesel powered, ARFF vehicle having a mechanical foam/water system designed for extinguishing flammable and combustible liquid fuel fires.

The specified Dry Chemical and Halotron complimentary agent systems (as noted in the respective sections of this specification) are acceptable, as are other optional additions to the basic vehicle dictated by local operational needs.

The primary function of the vehicle described in this specification is to provide an optimum level of ARFF suppression capability throughout the critical rescue and firefighting access area for the lowest practical cost.

Vehicles complying with this specification meet the ARFF vehicle requirements of FAR Part 139. However, it is also intended that this vehicle be suitable for other fire protection assignments at the airport.

DOCUMENTATION REQUIRED:

A basic manufacturer's product brochure(s) describing the unit being bid is to be provided.

Bidder is to include a user's list of a minimum five (5) 4500 gallon ARFF units that have been delivered within the past four (4) years within the USA to non-military airports.

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Chapter 1. INTRODUCTION

Section 1. GENERAL CHARACTERISTICS

1.0 DEFINITIONS:

1.1 This specification is intended to outline the technical specification requirements for an ARFF vehicle in accordance with the FAA –10C advisory and the NFPA-414 Standard for aircraft rescue and firefighting vehicles. Terms with meanings unique or specifically related to aircraft rescue and firefighting (ARFF) vehicle design, construction, and performance requirements are contained in Appendix 1 of the advisory.

1.2 This specification is for one new and unused class 2 (4500-gallon) Aircraft Rescue and Fire Fighting (ARFF) vehicle. Vehicles offered in the bid process shall conform in all respects to the requirements as set forth in the most current Federal Aviation Administration Advisory Circular No. 150/5220-10C. The referenced advisory circular (hereinafter referred to as the "-10C Advisory Circular") contains the performance standards, construction, and testing requirements for this type of vehicle.

1.3 In addition to the basic requirements of the referenced advisory, the following "Sponsor Election of ARFF Vehicle Subsystem Components" is made for inclusion in the vehicle price. The vehicle and all items listed under Table A3-1 shall be bid FOB Anchorage International Airport.

2.0 EXPECTED USE:

2.1 This specification covers a four-axle 8x8 all-wheel drive, diesel powered, ARFF vehicle having a mechanical foam/water system designed for extinguishing flammable and combustible liquid fuel fires.

2.2 The specified Dry Chemical and Halotron complimentary agent systems (as noted in the respective sections of this specification) are acceptable, as are other optional additions to the basic vehicle dictated by local operational needs.

2.3 The primary function of the vehicle described in this specification is to provide an optimum level of ARFF suppression capability throughout the critical rescue and firefighting access area for the lowest practical cost.

2.4 Vehicles complying with this specification meet the ARFF vehicle requirements of FAR Part 139. However, it is also intended that this vehicle be suitable for other fire protection assignments at the airport.

3.0 FIRE SUPPRESSION CHARACTERISTICS:

3.1 This vehicle is to be designed for a degree of off-pavement mobility not normally found in highway vehicles. The vehicle payload consists principally of the minimum usable (rated capacity) quantities of water shown in Table 1 of the advisory and sufficient quantity of three (3) percent AFFF foam concentrate to support at least two (2) full tanks of water.

3.2 The fire fighting system used on the vehicle shall consist of water/AFFF foam and

a secondary agent system for Dry Chemical as specified later in this document.

3.3 System: The AFFF foam system shall consist of the following; a poly tank with a useable capacity of 4500 gallons of water, a 540gallon reservoir for AFFF, a water pump, non-aspirating bumper and roof turrets as specified in sections 83-85, and water/foam handiness with variable pattern nozzle as specified in section 81.

3.4 Turret Controls: The joystick controls for the turret(s) shall be physically located to permit operation by one operator. The primary discharge and agent activation controls shall be operable from the driver's seat.

3.5 Handline Discharges: A minimum of two (2) each water/foam hand-lines are to be provided as defined in section 81.

3.6 Secondary Agent: A secondary agent system is also required as later defined in chapter 3, sections 1 and 2 of this document.

4.0 Reserved.

Section 2. CAB

5.0 CREW SPACE:

5.1 As per the FAA -10C Advisory Circular, plus the following.

5.2 VHF Radios:

5.2.1 To be an *ICOM* IC-A110 (Version 5), 20 channel programmable VHF aviation band radio.

5.2.1.1 To include noise canceling microphone, external speaker (for inside cab), and cab mounted external antenna.

5.2.1.2 Frequencies will be programmed by State of Alaska personnel.

5.2.2 A *SETCOM* 1310 headset/intercom system, with headsets for three (3) crewmembers interfaced with the aviation band and fire department radios.

5.2.2.1 All headsets shall have transmit, receive and intercom capability.

5.2.3 NOTE: VHF Radios and the intercom system are to be shipped loose. These items will be installed by the State of Alaska.

5.2.4 Also note that the warranty on these items are manufacturer's standard.

6.0 RIDE QUALITY:

6.1 The design objective for the vehicle ride quality shall be to permit safe operation over rough roads and adverse terrain found at the airport of intended service at speeds up to at least 35 mph without causing injury to the operating personnel (wearing seat belts) or damage to the vehicle.

7.0 CONTROLS:

7.1 As per the FAA -10C Advisory Circular.

8.0 SAFETY FEATURES:

8.1 As per the FAA -10C Advisory Circular.

Section 3. DESIGN CRITERIA

9.0 PERFORMANCE:

9.1 As per the FAA -10C Advisory Circular.

9.2 The design objective for the vehicle and the fire extinguishing system shall be performance in accordance with Section 7, for a class 2 vehicle.

9.3 Performance for the fire extinguishing system shall be in accordance with Section 7, Chapter 3.

10.0 FLEXIBILITY:

10.1 As per the FAA -10C Advisory Circular.

11.0 MAINTAINABILITY:

11.1 As per the FAA -10C Advisory Circular.

12.0 COMPONENT PROTECTION:

12.1 As per the FAA -10C Advisory Circular.

12.2 Mud flaps shall be provided at each wheel well position to reduce the damage from stones, brush, etc. being thrown off by the tires.

13.0 PAINTING, MARKING, AND LIGHTING:

13.1 The vehicle shall be painted and lettered in accordance with the marking and lighting standards of Advisory Circular No. 150/5510-5B.

13.2 All parts of the vehicle shall be cleaned, treated, primed, and painted prior to assembly.

13.3 After the vehicle is completely assembled, except for bright trim parts, the entire unit shall be primed, puttied, water sanded, and painted with no less than two (2) coats of *DUPONT* "Imron" #7744U paint of a lime green color or *SIKKENS* or *HENTZE* lead and chromate free polyurethane paint of equivalent color.

13.4 The finish coat of paint shall be free from "orange peel", runs, and other imperfections, which detract from the vehicle's appearance.

13.5 The numerals and the lettering shall be reflective Scotchlite material with a ¼ (0.25) inch wide "Black" vinyl border.

13.5.1 **TED STEVENS ANCHORAGE INTERNATIONAL AIRPORT**

13.5.1.1 To be minimum 12 inch in height.

13.5.2 **AIRCRAFT RESCUE AND FIRE FIGH**TING

13.5.2.1 To be minimum 6 inch in height.

13.5.3 The numeral " **E2** " shall be affixed to the cab roof 36 inches high and on each side of the vehicle 24 inches high.

13.6 A six (6) inch **white reflective stripe** shall be affixed on each side of the vehicle.

13.7 Lettering shall be provided on both sides of the vehicle, centered as best as possible and sized to fit the available space.

13.8 Actual details for reflective striping and lettering to be discussed with the purchaser after the bid is awarded and before construction begins.

14.0 INSULATION AND WATERPROOFING:

14.1 As per the FAA -10C Advisory Circular.

15.0 MATERIALS:

15.1 As per the FAA -10C Advisory Circular.

16.0 through 19.0 Reserved.

Chapter 2. AUTOMOTIVE SYSTEM

Section 1. FRAME

20.0 BALANCE AND CLEARANCES:

20.1 As per the FAA -10C Advisory Circular.

21.0 DIMENSIONS:

20.2 As per the FAA -10C Advisory Circular.

22.0 LOAD RATING:

20.3 As per the FAA -10C Advisory Circular, plus the following.

20.4 Two (2) each shackles shall be provided for use with the tow eyes at the front and rear of the frame.

20.5 In addition to the towing/eyes that are attached at the front and rear of the frame, a pintle hook shall be attached to the vehicle's frame at the rear of the vehicle.

Section 2. BODY COMPONENTS

23.0 COACH WORK:

23.1 As per the FAA -10C Advisory Circular.

24.0 COMPARTMENTS:

24.1 As per the FAA -10C Advisory Circular, plus the following.

24.2 The lower equipment storage, hand-line discharge, and agent piping compartments in the center body section area of the vehicle shall be equipped with roller shutter aluminum doors with a bar type external latching mechanism.

24.3 To facilitate the deployment and reloading of hose, a floor-mounted shelf with slide out tray shall be provided for the storage of each preconnect handline on each side of the vehicle.

24.4 To maximize available compartment space, a height adjustable shelf with a rollout tray shall be provided above each preconnect handline for the storage of equipment.

24.5 One (1) compartment designated for the storage of heavy rescue equipment shall be equipped with; one (1) floor-mounted roll-out shelf, and one (1) mid-height adjustable shelf with a rollout tray.

24.6 Each compartment and/or storage tray intended for storage of equipment items shall be lined with one-piece PVC open web matting.

24.7 Four (4) each, flush mounted, tubular type SCBA storage compartments shall be provided for spare SCBA bottles, two on each side of the rear body. Each SCBA storage compartment shall be provided with a (chrome plated) hinged cover and rubber lining on the interior.

25.0 HANDRAILS:

25.1 As per the FAA -10C Advisory Circular.

26.0 RUNNING BOARDS, STEPS, AND WALKWAYS:

26.1 As per the FAA -10C Advisory Circular.

Section 3. CAB AND ACCESSORIES

27.0 CONTROLS:

27.1 The following cab mounted controls shall be provided as applicable for the safe and efficient operation of the vehicle:

- 27.1.1 Accelerator Pedal.
- 27.1.2 Agent Flow Control.
- 27.1.3 Brake Pedal.
- 27.1.4 Complimentary Agent System.
  - 27.1.4.1 Activation Control
- 27.1.5 Differential Lock Control.
- 27.1.6 Dome Light Switch.
  - 27.1.6.1 Manual and Door Activated.
- 27.1.7 Engine Shutdown Switch.

27.1.8 Flashing Beacon Switch(es).

27.1.9 Foam Reservoir Control Valve.

27.1.10 Headlight Switch w/Dimmer Control.

27.1.11 Heater/Defroster Controls.

27.1.12 Horn Control.

27.1.13 Ignition Switch.

27.1.14 Master Electrical Disconnect Switch.

27.1.15 Panel Lights Switch with Dimmer.

27.1.16 Parking Brake Control.

27.1.17 Siren Switch with Microphone.

27.1.18 Spotlight Switch(es).

27.1.19 Starter Switch.

27.1.20 Steering Wheel, with Self-Canceling Direction Signal.

27.1.21 Top Deck Light Switches.

27.1.22 Transmission Range Selector.

27.1.23 Turret Control.

27.1.24 Water Flow Control Valve.

27.1.25 Windshield Wiper and Washer Controls.

27.1.26 Low engine oil pressure light & buzzer.

27.1.27 Low air pressure warning light and buzzer.

27.1.28 High coolant temperature light and buzzer.

28.0 CREW SPACE and DOORS:

28.1 As per the FAA -10C Advisory Circular, plus the following.

28.2 The vehicle shall be supplied with seating for four (4) crewmembers.

28.2.1 A fully adjustable seat shall be provided for the driver, and fixed seats shall be provided for three additional crewmembers.

28.2.2 All seats shall be stain resistant, puncture resistant vinyl.

28.2.3 The three (3) passenger seats shall have provisions for storing SCBA equipment in the seat backs, with a removable or retractable insert (cover) installed to cover the breathing apparatus bottle.

28.2.3.1 The driver's seat shall be hard backed.

28.2.3.1.1 An NFPA compliant SCBA bracket with restraint shall be provided for the driver’s pack is to be attached to the back wall of the cab.

28.2.3.2 All seats shall be equipped with a three-point seat belt

installation.

28.2.4 The cab shall be equipped with a center console to house the turret controls and radio equipment.

28.2.4.1 The Console shall be mounted between the driver's seat and the right hand crew position seat allowing access to controls from either side.

29.0 EQUIPMENT:

29.1 Per the AC plus the following:

29.2 **Mirrors:**

29.2.1 Two (2) each outside rear view mirrors having an area of not less than 60 square inches each shall be provided as well as a wide-angle convex mirror on each side with a minimum area of 25 square inches.

29.2.2 The mirrors (both flat and convex) shall be 4-way power remote controlled from the driver's seat.

29.2.3 Mirrors are to be heated with driver controlled switch.

29.3 All dash-mounted switches shall be illuminated rocker type switches with the legend for the function of the switch embossed into the illuminated area on the switch.

29.4 The cab shall be equipped with a tilt/telescoping steering column.

29.5 **Air conditioning:**

29.5.1 The air conditioning system shall be driven from the vehicle engine; 55,000 BTU minimum.

29.5.2 The system shall be integral with the vehicle heater/defroster unit, utilizing the same set of controls and vents.

29.5.3 The system shall be charged with 134A refrigerant.

29.6 **Defroster Fans:**

29.6.1 Two (2) each, 2-speed defroster fans shall be mounted on the instrument panel, one (1) on each side, inside the cab.

29.6.2 A switch shall be mounted in the instrument panel within the driver's reach to turn the fans "on" and "off". A guard shall be mounted around the rotating blade to prevent injury.

29.7 **Air Horns:**

29.7.1 Two (2) each air horns shall be provided.

29.7.2 The air horns shall be mounted in a protected area below the level of the front bumper and in such a position so that the trumpets will be in front of the vehicle's seated occupants.

29.8 **Windshield Deluge System:**

29.8.1 Shall be included to cool the windshield and to provide operator visibility during firefighting operations.

29.8.2 Clear water shall be discharged at a minimum rate of three (3) GPM under sufficient pressure and in a pattern, which will assure the operator's field of vision, can be kept clear of foam solution when used in conjunction with the windshield wiper.

29.8.3 The windshield wipers shall be automatically energized to the low speed mode of operation whenever the deluge system is operated.

29.9 A check engine light and audible alarm system shall be provided in the cab to indicate any of the following conditions; low engine coolant level, low engine oil pressure and high engine coolant temperature.

29.10 An ether starting system shall be provided to aid engine starting in cold weather conditions.

29.11 An engine high idle control shall be provided to maintain the engine idle at approximately 1200 RPM when activated. This control shall be safety interlocked to activate only after the transmission has been placed in the neutral position and parking brake has been set.

30.0 INSTRUMENTS AND WARNING LIGHTS:

30.1 As per the FAA -10C Advisory Circular, plus the following.

30.2 A Stability Dynamics Ltd. Lateral 'G' Force Device, Model LG Alert shall be provided.

30.3 All gauges are to read in pounds, PSI, gallons, volts, MPH, miles Fahrenheit, etc. Gauges that also include metric are acceptable.

30.4 **Hour Meter:** To include an *ENM* Model PT-12 LCD programmable engine hour meter, running engine activated. Meter is to be capable of displaying 99,999 hours.

30.4.1 ENM

30.4.2 Phone: 773-775-8400

30.4.3 www.enmco.com

Section 4. DRIVELINE AND CONTROLS

31.0 AXLES:

31.1 Per the AC plus the following:

31.1.1 To include the Off-Road High Mobility suspension described in item 58. Double acting hydraulic shock absorbers shall be provided on all axles.

31.1.2 A heavy-duty anti-roll bar shall be installed on each axle for increased vehicle stability and operator safety during high speed cornering maneuvers.

31.1.3 Solid axles are not acceptable.

32.0 BRAKE SYSTEM:

32.1 As per the FAA -10C Advisory Circular, plus the following.

32.2 An all-wheel anti-lock braking system designed to provide safe controllable stops from various speeds while traveling on low friction surfaces shall be provided.

32.3 A self-diagnostic cab mounted panel shall be provided to advice of the system's operation.

32.4 The front and rear axle brake assemblies shall be equipped with self-adjusting mechanisms.

32.5 A *BENDIX* air dryer with a thermostatically controlled purge chamber shall be supplied.

32.6 A 27 CFM engine driven air compressor shall be provided to ensure sufficient capacity to operate all of the vehicle's air system components.

32.7 Provisions shall be installed on the vehicle to drain all the air reservoirs from the exterior of the vehicle. The provisions shall eliminate the need for an individual to go underneath the vehicle to accomplish the required periodic draining of the air reservoirs. Each of the drain points shall be labeled. NOTE: This may be accomplished by the use of automatic air drains.

32.8 The air system shall be supplied with an on board auxiliary air compressor, 115-volt AC electric motor driven, to maintain the vehicle's air system at a working pressure between 80 to 100 PSI.

32.8.1 The 115-volt AC, 20-amp receptacle shall be an auto-ejecting type (*KUSSMAUL* Model 091-55-20WP-120).

32.8.2 A matching 20-amp plug shall also be provided.

32.9 The air system shall also be supplied with a connection at the rear of the vehicle to allow vehicle air system pressure to be maintained by a shop air compressor.

32.9.1 The connection shall be an auto-ejecting type (*KUSSMAUL* with the weatherproof adapter kit).

32.10 A pneumatic output connection shall be provided on each side of the cab. This connection shall have a quick disconnect, *MILTON* #777 or equal, female connector.

32.10.1 A 50-foot long ¼ (0.25) inch inside diameter air hose shall be provided, equipped with a connector to mate with the above connection.

33.0 STEERING:

33.1 As per the FAA -10C Advisory Circular, the chassis shall be equipped with power assisted steering.

33.1.1 The steering mechanism shall be so designed as to permit manual steering sufficient to bring the fully loaded vehicle to a safe stop in the event of failure of the power assist.

33.1.2 The power assisted steering shall have sufficient capacity so that no more

than 15 pounds of pull is required on the steering wheel in order to turn the steering wheel from lock to lock with the stationary vehicle wheels on dry level pavement and the engine idling.

33.1.3 Stops shall be provided which will accurately limit the turning angle to the maximum intended.

33.2 To facilitate a tight cornering radius and to reduce tire scrubbing on the rear tandem, the rear most axle in a tandem axle configuration shall be steerable and interfaced with the front axle steering either by mechanical or electronic means.

34.0 SUSPENSION:

34.1 As per the FAA –10C Advisory Circular to include the Off-Road High mobility suspension as described in item 58.

35.0 TRANSFER CASE:

35.1 As per the FAA –10C Advisory Circular the transfer case shall incorporate a drive to the front and rear axles engaged at all times during the intended airport service and which will not allow the vehicle to stall as long as the tire(s) of any axle have traction.

36.0 TRANSMISSION:

36.1 The transmission shall be an electronically controlled multi-speed automatic transmission, fully compatible and certified for use with the electronically controlled engine.

37.0 WHEELS AND TIRE ASSEMBLY:

37.1 As per the FAA -10C Advisory Circular, plus the following.

37.2 Tires shall be tubeless radial, *MICHELIN* 24R21 XZL or equal.

37.3 A spare tire and wheel/rim assembly for each different type wheel/rim used shall be provided. The spare tire shall be fully compatible be painted to match the other wheel/rim assemblies on the vehicle.

Section 5. ELECTRICAL SYSTEM

38.0 COOLANT HEATER:

38.1 Per the AC, an engine coolant preheating device shall be provided. It shall have sufficient capacity to maintain the engine at the manufacturer's recommended temperature for rapid starting and immediate high initial engine performance.

38.2 The 110-volt AC inlet connection shall be wired together with the on-board battery charger and provided with the *KUSSMAUL* (described earlier in this specification) auto-eject inlet connection at the rear of the vehicle.

39.0 LIGHTING AND MARKING SYSTEM:

39.1 As per the FAA -10C Advisory Circular, plus the following.

39.2 Two (2) each *WHELEN* (Centurion) mini-lightbars shall be mounted on the vehicle's top surface, at the front center body section of the vehicle to meet

visibility requirements. The left side lightbar shall be Red, the right side lightbar shall be Blue.

39.3 A single, Red/Blue split lens, *WHELEN* (Centurion) mini-lightbar shall be mounted at the rear of the vehicle on top of the engine enclosure. Red lens on the left, Blue lens on the right.

39.4 Two (2) each forward facing, red rectangular *WHELEN* LED strobe lights shall be mounted on the front of the vehicle near bumper height. Red lens on the left, Blue lens on the right.

39.5 Two (2) each rear facing, red, rectangular *WHELEN* LED strobe lights shall be mounted at the rear of the vehicle near bumper height. Red lens on the left, Blue lens on the right.

39.6 Four (4) each, Red, rectangular *WHELEN* LED strobe lights shall be mounted mid-height on each side of the vehicle.

39.7 Two (2) each amber strobe lights for non-emergency airport use, Whelen model 800 (or equal), shall be installed on the center body section of the vehicle; controlled by a switch mounted on the instrument panel in the cab.

39.8 Emergency lights shall be controlled by a three position rocker switch, labeled; “Standby – OFF – Emergency”. A second (disable) switch shall be provided to disable the perimeter lighting once on scene.

39.9 Headlights shall have a daytime running feature for safety purposes.

39.10 In addition to the normal vehicle headlights, two (2) high intensity, (*HELLA*, or equal) rectangular Halogen driving lights shall be mounted below the front bumper.

39.11 In addition to the normal vehicle headlights, two (2) high intensity, (*HELLA*, or equal) rectangular Halogen fog lights shall be mounted below the front bumper.

39.12 There shall be a lighted license plate bracket mounted at the rear of the vehicle.

39.13 Along with the illumination provided in the engine compartment, illumination shall be provided for all compartments upon door opening. An indicator light shall be mounted in the cab to make the vehicle's operator aware that a compartment door is open. Illumination shall be provided for all access steps and the top work deck area for re-servicing the water and foam tanks on the vehicle.

39.14 The cab dome lights shall be selectable between red and/or white illumination.

39.15 Two (2) each aircraft type map/reading lights shall be mounted above the center console.

39.16 One (1) each 12-volt DC, HID (High Intensity Discharge) light shall be mounted on the roof turret assembly. The light must move with the roof turret during horizontal and vertical operation. A dash mounted switch shall be provided.

39.17 Two (2) each halogen floodlights shall be mounted at the rear of the vehicle on the engine enclosure to illuminate the area behind the vehicle and supplement the standard backup lights. A switch shall be mounted in the cab. These lights shall also be switched "on" automatically whenever the vehicle is in the reverse mode of operation.

39.18 Four (*WHELEN*, or equal) 12-volt powered halogen scene lights shall be mounted, two on each side of the vehicle to provide illumination of the work area adjacent to the vehicle. A switch operational from ground level shall be mounted on each side of the vehicle and to control the operation of the respective lights on that side.

39.19 A 10.0 KW (minimum capacity), 110/240 VAC, 60 Hz hydraulically powered generator shall be provided, mounted on the vehicle in an enclosed compartment. The generator shall have in-cab remote start/stop controlled and also have a light that will indicate when it is operating.

39.19.1 The following lighting shall be powered by the on-board generator, low voltage switch controlled, for safety purposes, from the cab dash:

39.19.1.1 Two (2) each 1500-watt wide angle Quartz Halogen flood lights mounted on remote power telescoping poles, one (1) mounted on each side of the vehicle's center body.

39.19.1.1.1 When switched on; the telescoping poles shall automatically extend to the raised position, and shall retract to the stored position when switched to the off position.

39.19.1.2 Two (2) each 650-watt, slim-line, wide-angle floodlights mounted at the front of the vehicle above the windshield.

39.19.2 Four (4) each 120 volt AC duplex receptacles with one (1) straight blade and one (1) twist lock, shall be mounted with two (2) receptacles on each side of the cab complete with weatherproof hinged cover.

39.19.2.1 Cab outlets shall be GFI protected at the breaker box.

39.19.3 An electric cord reel shall be provided with 200 feet of 12/3 SO safety yellow cord is cold weather flexible to minimum minus 40 degrees Fahrenheit.

39.19.3.1 This cord reel shall be wired through a 20 amp circuit breaker and receive its power from the generator.

39.19.3.2 A *CIRCLE D LIGHTS* Powerbox Junction Box weatherproof electrical junction box shall be provided at the end of the cord equipped with two (2) each 20-amp twist locks and two (2) each 15-amp straight blade connections.

39.19.3.3 The reel shall be mounted in an upper compartment on the right side of the vehicle.

39.19.3.3.1 The cord reel shall be equipped with a 12-volt DC electric rewind motor.

39.19.3.3.2 The rewind switch shall be mounted adjacent to the cord reel.

39.19.3.3.3 A tension device is not required, but a means to prevent the cord reel from unreeling in the stored position must be provided.

39.19.3.3.4 A roller system shall be provided to allow for

deployment of the cord from the reel without chafing.

39.19.3.3.5 The cord reel shall be GFI protected at the junction box.

40.0 POWER SUPPLIES:

40.1 As per the FAA -10C Advisory Circular, plus the following.

40.2 A 12-volt electrical system shall be supplied.

40.2.1 The output of the alternator system shall have a minimum output rating of 160-amps at idle.

40.2.2 The alternator system shall consist of two (2) each 160-amp alternators having a combined output of 320-amps and providing a redundant backup if one alternator should fail.

40.2.3 A dash mounted warning system shall be provided to indicate an alternator failure.

40.3 Due to the continuous charging load required by the radios, lanterns, etc., an on-board battery charger, *KUSSMAUL* Model Auto 091-12DV, with a 12-amp output shall be installed on the vehicle.

40.4 The electrical connection for the required on-board electrical components (battery conditioner and the engine coolant pre-heater) shall be supplied in a 115-volt AC, 20-amp, automatic eject configuration, *KUSSMAUL* Model 091-55-20-120 (described earlier in this specification).

40.4.1 The required electrical inlet connection shall be mounted at the rear of the vehicle.

40.5 A quantity of six (6) each SAE, group 31 type batteries, rated at 950 CCA each shall be provided.

40.6 A remote voltmeter shall be installed adjacent to the batteries.

40.6.1 The voltmeter shall be energized by a switch so the condition of the batteries can be read.

40.7 A maintenance master switch shall be mounted near the engine service area that will interrupt power to the starter solenoid and prevent the vehicle from being started during vehicle maintenance.

41.0 STARTER:

41.1 A 12-volt starting device shall be provided.

42.0 WIRING:

42.1 As per the FAA -10C Advisory Circular.

43.0 RADIO INTERFERENCE:

43.1 As per the FAA -10C Advisory Circular.

Section 6. ENGINE AND ACCESSORIES

44.0 COOLING SYSTEM:

44.1 As per the FAA -10C Advisory Circular, plus the following.

44.2 To provide maximum performance and life expectancy, a thermostatically controlled fan clutch or similar device shall be provided to assist in rapid warming of the engine and transmission to the proper operating temperatures.

44.3 The cooling system shall be equipped with a cooling system filter/conditioner with spin-on cartridge.

44.4 All the coolant and the heater hoses shall be made of a silicone material and secured with constant torque clamps.

45.0 EXHAUST SYSTEM:

45.1 As per the FAA -10C Advisory Circular, plus the following:

45.1.1 To include exhaust filter system (*WARD DIESEL*, No-Smoke).

45.1.1.1 SPARE: To include one (1) each spare filter cartridge.

46.0 FUEL SYSTEM:

46.1 As per the FAA -10C Advisory Circular, plus the following.

46.2 To minimize the possibility of losing a fuel prime to the ARFF vehicle's main engine, an electric in-line auxiliary fuel pump for the sole purpose of priming shall be provided.

46.3 This priming pump shall operate automatically whenever the main engine is started and also have provisions to operate to re-prime the ARFF vehicle's primary engine's fuel system after replacement of the fuel filter(s).

46.4 A fuel/water separator with a thermostatically controlled heating element shall be provided.

47.0 GOVERNOR:

47.1 An electronically controlled engine governor which will not adversely affect engine or pump performance shall be provided and be set to limit engine speed so that it shall not exceed the maximum rpm recommended by the engine or driveline component manufacturers.

48.0 LUBRICATION:

48.1 As per the FAA -10C Advisory Circular.

49.0 POWER EQUIPMENT:

49.1 The vehicle shall be equipped with a turbo charged and after cooled diesel engine, equipped with an electronic fuel management system. The engine shall be an in-line six cylinder four stroke engine (*CATERPILLAR* model C-18) rated at a minimum of 950 BHP @ 2300 RPM. The engine shall be designed to meet current Federal emissions standard for off-road vehicles at time of delivery.

50.0 WINTERIZATION:

50.1 Per the AC, a minus 40 degree Fahrenheit winterization system is required.

50.2 The winterization system shall be of the hot liquid recirculating type, 50,000 BTU minimum, with the heat being produced from a diesel fuel fired heater.

50.2.1 It shall be capable of protecting the piping system from freezing at minus 40 degrees below zero Fahrenheit.

50.2.2 Along with protecting the piping system, additional heating shall be provided in compartments that are less than 72 inches above the ground that are intended for rescue equipment storage.

50.2.3 The temperature in these equipment storage compartments shall be maintained at a minimum of 40 degrees Fahrenheit with the winterization system in operation.

Section 7. AUTOMOTIVE PERFORMANCE

51.0 ACCELERATION:

51.1 The engine shall have sufficient power to meet the FAA –10C acceleration requirement of 0-50 MPH in less than 35 seconds for a 3000-gallon or larger vehicle. The same performance requirement applies to the larger 4500-gallon vehicle.

52.0 BRAKE SYSTEM:

52.1 As per the FAA -10C Advisory Circular.

52.2 To supplement the conventional vehicle braking system, the engine shall be equipped with a (Jake Brake, or equal) engine braking system with ON/OFF and HI/Med/Low mode switch located in the cab dash.

53.0 DYNAMIC AND STATIC STABILITY:

53.1 The vehicle shall meet all stability requirements of the FAA -10C advisory circular, including the 30-degree side slope stability requirement.

54.0 ENVIRONMENTAL CONDITIONS:

54.1 As per the FAA -10C Advisory Circular.

55.0 GRADABILITY:

55.1 As per the FAA -10C Advisory Circular.

56.0 OPERATIONAL RANGE:

56.1 As per the FAA -10C Advisory Circular.

57.0 TOP SPEED:

57.1 As per the FAA -10C Advisory Circular.

58.0 OFF-ROAD HIGH MOBILITY SUSPENSION:

58.1 The vehicle shall be equipped with an All-Wheel Independent Suspension to meet the desired ride quality and handling characteristics for an Off-Road High Mobility Vehicle as defined by item 58 in the advisory.

58.2 The independent suspension system shall be designed to provide maximum ride comfort and enhanced roll stability.

58.2.1 The design shall allow the vehicle to travel at highway speeds over improved road surfaces, and at moderate speeds over rough terrain with minimal transfer of road shock and vibration to the vehicle's crew compartment.

58.2.2 Each wheel shall have at least one coil spring and heavy-duty dual acting shock absorber.

58.2.3 In addition, each wheel end shall also have energy absorbing jounce and rebound bumpers to prevent bottoming and topping of the suspension.

58.2.4 The suspension design shall be such that there is at least sixteen (16) inches of total wheel travel and a minimum of seven (7) inches in either direction before the suspension bottoms on the energy absorbing bumpers.

58.2.5 Each axle shall be equipped with an anti-roll bar for increased cornering stability.

59.0 DRIVERS ENHANCED VISION SYSTEM:

59.1 The vehicle shall be equipped with Forward Looking Infrared. The FLIR system shall incorporate the latest 'Microbolometer' infrared technology with not moving parts.

59.1.1 The FLIR system shall provide vision enhancement in low visibility conditions to include; operation during total darkness, fog, severe weather, blowing sand and firefighting operations during which thick smoke is emitted.

59.1.2 It shall also provide the ability to detect hot spots and residual heat in all light conditions, to aid in the directing of firefighting efforts.

59.1.3 A 10 inch high resolution flat screen monitor shall be provided in the cab.

59.2 **THE FOLLOWING OPTION IS REQUIRED TO BE PRICED (Refer to Section V – Bid Price Schedule):**

59.2.1 An "Eagle Eye" Driver Enhanced Vision System (DEVS) manufactured by *EAGLE INTERGRATED SOLUTIONS, INC.*, shall be provided.

59.2.2 The Eagle Eye DEVS system is designed to meet or exceed the FAA specifications for DEVS, as published in Advisory Circular (AC) 150/5210-19 and FAR Part 139, Emergency Response Requirements as well as the NPFA 414 requirements.

59.3 The DEVS system shall provide low visibility navigation for a vehicle operator giving rescue crews the capability to safely navigate to the site of an accident,

either on or off the airfield.

59.3.1 A wireless data link shall allow vehicle crews and command center to exchange critical information in order to react to changing situations and save lives.

59.4 The DEVS system shall consist of the following:

59.4.1 **Driver Navigation:** The Driver Navigation subsystem shall display the vehicle's location, the location of the crash site, a vehicle route and other useful information on the computer map display. The vehicle location will be determined using a Global Positioning System (GPS).

59.4.2 **Vehicle Tracking:** The Vehicle Tracking subsystem shall display the location of other DEVS equipped vehicles. Tracking capability shall reduce driver communications workload and improve the situational awareness of the driver and command or dispatch personnel.

59.4.3 **Display Size:** A 15 inch diagonal viewable (touch screen) display shall be provided to allow the driver to easily view and control the map display while operating the vehicle.

59.4.4 **Waypoints & Indicators:** The DEVS system shall be capable of displaying an icon at the site of an incident as well as the direction, distance and ETA to the site. The system shall allow the driver to quickly load routes that guide the vehicle to the accident site using both audible and visual prompts.

59.4.4.1 **To include a GPS re-**broadcaster shipped loose for installation in the fire station by Anchorage International Airport personnel.

59.4.5 **Map Detail / Coverage Area:** The moving map image shall be produced using air photos, topographical maps, drawings to show a realistic and recognizable view of the terrain. The coverage area shown shall include areas outside of the airport property in case the incident occurs outside the fence line.

59.4.6 **Wireless Data Link:** The DEVS system shall use a high-speed wireless data link (CDMA2000 1xRTT) that allows the ARFF vehicle to communicate with other DEVS equipped vehicles or a base unit. This shall allow the ARFF vehicle mounted DEVS system to send and receive incident rescue-critical information (aircraft type, flight number, fuel state, passenger data, and hazardous material information) while on the move or at the crash site.

59.4.7 **Other Applications:** The DEVS system shall use a Windows-Based operating system and a full-featured PC computer. This will allow the display to be used for a multitude of other purposes within the vehicle (crash tables, data look-up, scene command and control, etc.) The system shall be compatible with other Windows-based software applications and allow a document viewer to be launched from a "Launch Applications" icon. The user could then select from a list of <u>user-supplied software applications or electronic documents</u> to access such as:

59.4.7.1 HAZMAT Procedures.

59.4.7.2 Material Safety Data Sheets (MSDS).

59.4.7.3 Aircraft Types and Structures (Crash Tables).

59.4.7.4 Building Plans.

59.4.7.5 ARFF Vehicle Operator Manuals, Parts Manuals and Service Manuals.

59.4.7.6 Other Applications as Required.

59.4.7.7 **THE FOLLOWING OPTION IS REQUIRED TO BE PRICED (Refer to Section III – Price Schedule):**

59.4.7.7.1 **DEVS Command and Control:** The DEVS system must provide the option to "Command and Control" all DEVS equipped vehicles from a remote location such as a desktop computer and/or supervisor/incident commander's vehicle. This will include the following:

59.4.7.7.1.1 GPS based information (Location, speed and heading) for each equipped vehicle.

59.4.7.7.1.2 Ability to customize icon for each equipped vehicle.

59.4.7.7.1.3 Ability to "see all" or only "select" vehicles for viewing/interaction.

59.4.7.7.1.4 Ability to set-up warning/geofences/zones (for both "all" and only certain vehicles) from the remote location that will be heard/noticed on both the equipped vehicles as well as the remote location itself.

59.4.7.7.1.5 The system must be secure from outside interference/tampering.

59.4.7.7.1.6 The system should be capable of operating by means other than cellular coverage.

60.0 Through 69.0 Reserved.

Chapter 3. FIRE EXTINGUISHING SYSTEMS

Section 1. DRY CHEMICAL SYSTEM

70.0 Through 72.0

AGENT CONTAINER(S) AND COMPONENTS, DELIVERY PIPING AND VALVES AND PROPELLANT CONTAINERS AND COMPONENTS:

A Dry Chemical system is not required in the base vehicle. **(Refer to Section III –Price Schedule)**

Section 2. CLEAN AGENT - OPTION

73.0 Through 75.0

AGENT CONTAINER AND COMPONENTS, AGENT DELIVERY PIPING AND VALVES AND PROPELLANT CONTAINERS, AND COMPONENTS:

A Halotron system is not required in the base vehicle. **(Refer to Section III –Price Schedule)**

Section 3. FOAM CONCENTRATE SYSTEM

76.0 CONCENTRATE PROPORTIONER:

76.1 Per the AC with the proportioner set for three (3) % AFFF foam concentrate.

76.2 A quantity of 550 gallons of AFFF, three (3) % foam concentrate shall be provided, conforming to mil standard Mil-F-24385, and provided in 55 gallon containers. The manufacturer of the foam must be registered on the QPL listing.

77.0 CONCENTRATE RESERVOIR AND PIPING:

77.1 As per the FAA -10C Advisory Circular, plus the following.

77.2 The foam reservoir shall be constructed of UV protected Polypropylene material, having a capacity for a minimum of 540 gallons and provided with a lifetime warranty.

77.3 A foam fill with a 1½ (1.5) inch NSFHT swivel female connection shall be provided on the left side of the vehicle. This connection shall be equipped with a quarter turn ball valve and furnished with chrome connections with rocker lugs including the plug/chain assembly. This connection can also be used as the drain as described in paragraph 77.

77.4 A vehicle mounted foam transfer pump shall be provided. The pump shall be a pneumatic diaphragm style pump, and designed to have the capability of both loading and off-loading foam to/from the vehicle through the 1½ (1.5) inch connection noted above.

Section 4. WATER SYSTEM

78.0 PIPING, COUPLINGS, CONNECTIONS, AND VALVES:

78.1 A structural system capable of 1000 GPM discharge shall be provided.

78.2 A gated 2½ (2.5) inch I.D. female swivel pump supply connection shall be supplied near the pump operator's panel.

78.3 A pump operator's panel shall be installed on the left hand side of the vehicle. This panel shall consist of a minimum the following:

78.3.1 Pump engine tachometer.

78.3.2 4½ (4.5) inch diameter liquid filled pump discharge pressure gauge.

78.3.3 Test connections for the pump pressure gauges.

78.3.4 Pump engine oil pressure gauge.

78.3.5 Pump engine coolant temperature gauge.

78.3.6 A hand throttle to control the pump engine speed.

78.3.7 A means of selecting water or foam induction for discharge.

78.3.8 Panel illumination.

78.3.9 An indicator light that warns the operator not to open throttle unless the vehicle is safely engaged in the pump mode.

78.4 Four (4) each gated 2½ (2.5) inch I.D. NFHT male threaded connections shall be provided, two (2) on each side of the vehicle.

78.4.1 Each connection shall be angled downward at 30 degrees, provided with cap and chain, and be equipped with a liquid filled, 2½ (2.5) inch diameter gauge.

78.4.2 A manual foam metering valve shall be provided at the left side for variable rate proportioning at these connections.

78.4.3 In addition to the cab mounted and compartment mounted tank level gauges, external water/foam level indicators shall be provided on each side of the upper centerbody section. These are intended to provide the Incident Commander with a visual indication of the vehicles agent levels from a distance, without the need for radio contact with the vehicle operators.

78.5 A remote mounted, LED bar graph type, water level and foam level gauge shall be provided on each side of the vehicle, in addition to level gauges in the cab.

79.0 WATER PUMP AND PUMP DRIVE:

79.1 A water pump certified by the pump's manufacturer at a minimum discharge capacity capable of simultaneous discharge of the roof turret, bumper turret, and hand-lines as defined in the performance requirements of the FAA Circular 150/5220-10B, paragraph 79 & 127.

79.1.1 The housing and the impeller of the water pump shall be made of a bronze material.

79.1.2 An hour meter shall be provided adjacent to the water pump.

80.0 WATER RESERVOIR AND PIPING:

80.1 The water reservoir shall be constructed of UV protected Polypropylene material, and shall be provided with a lifetime warranty.

80.2 A tank to pump shutoff valve shall be provided.

80.3 A 2½ (2.5) inch I.D. NSFHT female swivel fill connection equipped with a ¼ (0.25) inch strainer and a cap with a chain shall be mounted on each side of the vehicle.

80.3.1 The connection shall be equipped with a bleeder valve to bleed off air or water in the hose connected to it.

80.3.2 This connection shall be furnished with chrome connections with rocker lugs including the plug/chain assembly.

80.4 A high volume tank fill connection shall be provided both left and right sides of the vehicle, sized to permit filling of the tank in two (2) minutes at a pressure of 50 PSI. The large diameter tank fills shall be provided, with a 4½ (4.5) inch NST connection.

80.5 Each tank fill and discharge connection shall be provided with bleeder valves to vent off residual water pressure to facilitate the disconnecting of hoses.

Section 5. HANDLINES, REELS, AND COMPONENTS

81.0 HANDLINES:

81.1 Two (2) each preconnected soft-jacketed handlines for the discharge of foam/water shall be provided, one on each side of the vehicle, mounted in a lower side compartment on a rollout tray.

81.2 Each handline shall be equipped with 250 foot of 1¾ (1.75) inch I.D. soft jacket type hose and a pistol grip nozzle.

81.3 Flow of each handline shall be a minimum of 125 GPM controlled at the compartment and at the cab dash with a safety interlock system that will only allow charging after all of the hose has been deployed.

81.4 The cab dash shall have an indicator light to advise when hose is fully deployed from each compartment.

81.5 Automatic throttle activation for the pumping RPM shall be accomplished when the handline discharge nozzle is opened.

81.6 An override throttle control shall be provided for each handline for the initial charging of the handline.

82.0 HOSE AND REEL COMPARTMENTS:

82.1 Per the AC, as applicable to the hand-line configurations listed in item 81.

Section 6. TURRETS AND UNDERTRUCK NOZZLES

83.0 BUMPER TURRET:

83.1 The base vehicle will be equipped with the bumper turret described below.

83.2 A *FEECON* automatic oscillating 500 GPM bumper turret shall be provided.

83.2.1 The bumper turret shall meet the performance standard of Table 3, performance Parameter 7.

83.2.2 The joystick control shall be located in the cab within easy reach of the driver and a second crewmember.

83.2.3 The range of the horizontal sweep when operating in the automatic oscillation mode shall be fixed at 45 degrees each side of center.

83.3 **Note:** Refer to Section V – Bid Price Schedule for alternative requirements.

84.0 ROOF TURRET:

84.1 The base vehicle will be equipped with the roof turret described below.

84.2 The primary turret shall be an electro pneumatic remote controlled type with electric joystick control.

84.2.1 It shall be of a single barrel configuration and designed to discharge foam or water at a dual rate of 600/1200 GPM.

84.2.2 The roof turret shall be the non-aspirating type and configured with a variable pattern control to adjust from a straight stream to a wide dispersed pattern.

84.2.3 The turret shall also be provided with the necessary controls will be provided to permit the selection of the foam solution or water from inside the cab.

84.2.4 The turret shall be aimed by a single, remote mounted electric joystick control.

84.2.5 Roof turret discharge valve will be pneumatically assisted.

84.2.6 Controls shall be located to allow vehicle and turret operation by a single operator.

84.2.7 The turret shall have a discharge pattern, which is infinitely variable from a flat pattern to a solid stream of foam.

84.2.8 The turret shall be optimized for AFFF with the resultant foam conforming to the properties specified in 1995 NFPA 414, Table 2-15.9.1.

84.2.9 All foam patterns listed shall be at an operating pressure of 220 PSI.

84.3 **Note:** Refer to Section V – Bid Price Schedule for alternative requirements.

85.0 HIGH-REACH EXTENDIBLE TURRET:

85.1 **Note:** Refer to Section III – Price Schedule for alternative requirements.

86.0 UNDERTRUCK NOZZLES:

86.1 A minimum of four (4) under-truck nozzles shall be supplied that will provide a sufficient foam combined spray pattern that will cover the total under-truck area as well as the inner sides of the wheels and tires. On/Off controls shall be provided in the cab and at each side of the cab adjacent to the door.

87.0 DUAL AGENT TURRET:

87.1 As noted in the respective bumper or roof turret sections.

Section 7. AGENT SYSTEM PERFORMANCE

88.0 COMPLEMENTARY AGENT SYSTEM:

88.1 As per the FAA -10C Advisory Circular.

89.0 WATER/FOAM AGENT APPLICATORS:

89.1 As per the FAA -10C Advisory Circular.

Chapter 4. QUALITY ASSURANCE

Section 1. GENERAL CONSIDERATION

100.0 Through 134.0

The contractor is required to fully comply with all applicable items regarding quality assurance, test and technical service and training as defined in items 100 through 134 of the AC.

135.0 AUXILIARY EQUIPMENT Table A3-1:

135.1 The following auxiliary equipment shall be supplied with the vehicle:

135.2 **Wheel Chock Set:** One (1) each set, aluminum, six (6) inch high minimum, mounted on the vehicle. Chocks are to be roped together.

135.3 **Spanner and Hydrant Wrench Sets:**

135.3.1 Two (2) each, *AKRON* Style 2443, wrench holder sets including:

135.3.1.1 Two (2) each, *AKRON* Style 10 universal spanner wrenches.

135.3.1.2 One (1) each, *AKRON* Style 15 hydrant wrench.

135.3.1.3 One (1) each, *AKRON* Style 2441 wrench holder.

135.3.1.4 To be shipped loose.

135.3.2 One (1) each, *STORZ* Model A3810 spanner wrench set, which includes:

135.3.2.1 A 2, 3, 4, and 5-inch spanner wrench and an A3815 bracket.

135.3.2.2 To be shipped loose.

135.4 **Pike Pole:**

135.4.1 One (1) each, 12 foot, with fiberglass handle and mounting brackets.

135.4.2 To be shipped loose.

135.5 **Rope Line:** One (1) each, 100 foot, with salving hook.

135.6 **Axes:**

135.6.1 Two (2) each, *PARATECH* pry axe, with holder.

135.6.1.1 To be shipped loose.

135.6.2 Rescue Axe: One (1) each, large six (6) pound serrated large non-wedge type head with fiberglass handle and mounting bracket for mounting onto the vehicle.

135.6.2.1 To be shipped loose.

135.7 **Blanket:** One (1) each, fire resistant furnished with a storage pouch.

135.8 **Medical Kit:** One (1) each, first aid/first responder, minimum of 36 units.

135.9 **Lanterns:** Four (4) each, rechargeable flashlights, with chargers mounted in the cab, *STREAMLIGHT* Model SL-45.

135.10 **Crowbar:** One (1) each, pinch point, 60 inch.

135.11 **Wrecking Bar:** One (1) each, with gooseneck, 36 inch, with holder. To be shipped loose.

135.12 **Bolt Cutter:** One (1) each, bolt, 24 inch, with holder. To be shipped loose.

135.13 **Rescue Knives:**

135.13.1 Two (2) each, "V" blade, *STEBCO* Model RN-2 or similar, with two (2) each DZUS fastener tools mounted on each tool.

135.13.2 To include six (6) each spare blades.

135.14 **Hacksaw:** One (1) each, heavy-duty, with spare blades.

135.15 **Pliers:** One (1) each, lineman, 8 inch, with insulated handle.

135.16 **Pliers:** One (1) each, slip joint, 10 inch.

135.17 **Screwdriver:** One (1) each 18x1/2 inch with insulated handle.

135.18 **Screwdriver Set:** One (1) each set, assorted sizes and blade types.

135.19 **Shears:** One (1) each, sheet metal, straight cut.

135.20 **Vice Grip Wrench:** One (1) each, 10 inch.

135.21 **Cold Chisel:** One (1) each, 8x1 inch.

135.22 **Hammer:** One (1) each, 4 pound.

135.23 **Tool Box:** One (1) each, heavy-duty poly, sufficient in size to carry the basic hand tools noted above.

135.24 **Ladders:**

135.24.1 One (1) each *LITTLE GIANT* 22-foot, mounted on top of the vehicle with quick release brackets. To be shipped loose.

135.24.2 One (1) each - *DUO SAFETY* 24 foot extension ladder, mounted on top of the vehicle.

135.25 **Portable Floodlights:** Two (2) each, 500-watt; *CIRCLE D* Model 150 with mounting brackets.

135.26 **Portable Cord Reels:** Two (2) each, heavy-duty, 200 foot cord capacity, spring rewind.

135.26.1 Each cord is to be equipped with a *CIRCLE D LIGHTS* Powerbox Junction Box weatherproof junction box with four (4) each 3-prong twist-lock NEMA 15A-125V receptacles. To be high visibility yellow in color and include a location indicator light.

135.26.2 Electric cord, yellow in color, to be load rated with wire being flexible in cold weather down to minus 40 degrees minimum.

136.0 WARRANTIES:

136.1 Refer to Section III – Special Terms and Conditions.

137.0 THE FOLLOWING OPTION IS REQUIRED TO BE PRICED (Refer to Section III – PRICE SCHEDULE):

137.1 **On Site Training:**

137.1.1 At time of delivery the successful bidder shall provide a factory-trained technician, to perform the following:

137.1.1.1 Pre-delivery inspection of the finished vehicle.

137.1.1.2 Prepare vehicle for service.

137.1.1.3 Complete final adjustments to all operating systems.

137.1.1.4 Conduct two (2) day operator familiarization training for four (4) shifts of operators.

137.1.1.5 Conduct one (1) each three (3) day operator training for one (1) shift of operators.

137.1.1.6 Conduct advanced maintenance training for the maintenance staff.

137.1.1.6.1 Two (2) each four (4) day classes.

137.1.1.6.2 Two (2) each three (3) day advanced electronic classes.

138.0 THE FOLLOWING OPTION IS REQUIRED TO BE PRICED (Refer to Section III – Price Schedule):

138.1 **High and Low Flow Low-Attack Turret (In Lieu of Bumper Turret):**

138.1.1 A multi-position, high and low flow, low-attack turret with a non-aspirating Hydro-Chem direct injection nozzle shall be provided.

138.1.2 The turret shall include the following design features:

138.1.2.1 Nozzle Sweep Assembly:

138.1.2.1.1 The nozzle sweep assembly shall consist of a double swivel joint allowing the nozzle to sweep in both horizontal and vertical planes.

138.1.2.1.2 The horizontal axis rotation shall allow the nozzle to be directed at least 90 degrees to either side of center for a minimum of 180 degree horizontal sweep.

138.1.2.1.3 The elevation axis shall allow the nozzle to be elevated at least 45 degrees above the horizontal and be depressed to discharge agent within 30 ft. of the front of the vehicle.

138.1.2.1.4 Both horizontal and vertical drive motors shall be electric with a clutch mechanism and/or limit switches to prevent damage to the motors at rotation limits.

138.1.2.2 Nozzle:

138.1.2.2.1 The nozzle shall have a variable pattern control and have an automatic flow mechanism to maintain consistent pressure and flow at either discharge rate whether in the straight stream or fully dispersed (fog) pattern. The nozzle will be a non air aspirating type with 12-volt powered electric pattern actuation for straight stream or fog pattern selection. The nozzle shall meet or exceed all performance requirements defined in the FAA –10C Advisory Circular and the latest edition of NFPA-414.

138.1.2.2.2 The turret shall be equipped with a non-aspirating nozzle capable of water and foam flow discharge rates of either 375/750 GPM or 600/1200 GPM (to be determined at time of order). The turret assembly shall be equipped with an automatic leveling device to keep the nozzle parallel to the ground regardless of the position of the boom mechanism.

138.1.2.2.3 An electronic joystick control shall be provided with integrated controls for discharge activation, selection of agent type, and discharge rates and patterns [from straight stream to fully dispersed (fog pattern)].

138.1.2.3 Boom Design:

138.1.2.3.1 The nozzle assembly shall be attached to a boom mechanism which is adequately reinforced to sustain all anticipated loads and reaction forces when the nozzle is discharging. The device shall be capable of

being lowered from the stored position, near bumper height, so that the centerline of the nozzle will be approximately 24 inches above the ground. The design shall allow the boom and nozzle to be stored in a position providing minimum protrusion from the front of the vehicle, while maintaining a 30-degree angle of approach.

139.0 THE FOLLOWING OPTION IS REQUIRED TO BE PRICED (Refer to Section III – Price Schedule):

139.1 **High Reach Extendible Turret:**

139.1.1 An articulating, telescoping aerial nozzle device shall be installed, midship mounted for maximum stability and best weight distribution. Elevation of the nozzle shall be a minimum of 65 feet, measured from ground level (subject to mounting base height on vehicle). Maximum horizontal reach shall be approximately 45 feet, measured from the base centerline. The nozzle shall be capable of being positioned at or below ground level in front of the vehicle.

139.1.2 The nozzle shall be stowed in a forward position, directly over the vehicle cab. The nozzle shall be capable of full operation in either the stowed or elevated position as the vehicle approaches the fire. This operation will replace the typical fixed turret appliances mounted on the cab roof.

139.1.3 The water discharge piping system shall be capable of flowing 600/1200 GPM with minimum friction loss. It shall meet all discharge performance requirements set forth in Advisory Circular A/C 150-5220-10C.

139.1.4 Nozzle Sweep Assembly:

139.1.4.1 The nozzle sweep assembly shall consist of a double swivel unit allowing the nozzle to sweep in both horizontal and vertical planes. The elevation axis shall allow the nozzle to be elevated 135 degrees or depressed 125 degrees either side of center for a 260 degree vertical sweep.

139.1.4.2 The rotation shall allow the nozzle to be directed 90 degrees either side of center for a 180 degree horizontal sweep. The nozzle assembly shall be adequately reinforced to sustain all anticipated loads and reaction force of the volume nozzle, plus penetrating forces created by the piercing nozzle. A clutch mechanism shall allow the piercing nozzle to rotate if penetrating force exceeds safe nozzle design limits.

139.1.5 Nozzle and Controls:

139.1.5.1 The nozzle shall be an automatic master stream type with a water/foam flow range meeting the requirements of NFPA 1901-1991, Section 8-5, Water Tower. The nozzle must maintain a constant 100-105 PSI nozzle pressure throughout the flow range in straight stream through wide fog patterns.

139.1.5.2 Remote nozzle control shall be a single joystick type. The controller shall have dual axis function plus thumb button switch. Left and right motion shall control horizontal sweep. Forward and back motion shall control vertical sweep. The thumb button shall control straight stream/fog patterns.

139.1.6 Hydraulic Controls:

139.1.6.1 The lift and tilt cylinder valves shall include internal holding valves for maximum safety in the event of pressure loss or hydraulic line failure. Flow control shall be electric, remote controlled, proportional type installed to insure smooth operation of the boom assembly. All hydraulic valves shall be equipped with extended handle manual overrides for emergency operation in event of electrical failure.

139.1.6.2 A single joystick with trigger activation shall be provided for elevation, extension, retraction and rotation operations. The controller shall have four axis function. Left and right motion shall control telescoping action. Forward and back motion shall control elevation. The tilt-down motion shall be controlled by a thumb button on the joystick controller. Twisting the joystick rotates right or left.

139.1.6.3 The hydraulic pumping system shall be capable of providing full performance at any engine speed. The hydraulic pump and reservoir shall be a separate system independent of other vehicle functions. The pump shall be pressure compensating type that will react to demand of the aerial nozzle controls without imposing unnecessary horsepower demands on the engine when not in use.

139.1.6.4 The hydraulic reservoir shall be a minimum of 25 gallons capacity, clearly marked "Hydraulic Oil Only" and located to provide maximum heat dissipation and prevent contamination by water or foam.

139.1.7 Emergency Back-Up Pump:

139.1.7.1 A self contained hydraulic power unit consisting of an integral pump/motor shall be provided as an alternative power source in event of main hydraulic pump failure. The unit shall be capable of returning the booms to a bedded position.

139.1.8 Automated Controls:

139.1.8.1 An automated controller shall be provided for standard operations of hydraulic controls. The automated controller shall accept input from sensors and the joystick and direct these inputs to the hydraulic valves. The automated controller shall prevent boom movement from interfering with the vehicle cab. Joystick motion shall be "Ramped" so that slow precise boom and nozzle positioning can be achieved with operating speed

increasing as the joystick is moved to its travel limit.

139.1.8.2 Automatic functions shall be provided as follows:

139.1.8.2.1 "Home" - Automatically returns the extendible waterway to the bedded position for travel and storage.

139.1.8.2.2 "Auto Up" - Automatically elevates and extends the extendible waterway to its full "up" position.

139.1.8.2.3 "Auto Tilt" - Automatically tilts the extendible waterway for low level fire fighting.

139.1.8.2.4 "Auto Extend" - Automatically telescopes the waterway straight ahead of the vehicle for roof turret type operation.

139.1.9 Lighting System:

139.1.9.1 Two (2) high intensity floodlights shall be attached to the nozzle assembly. Each light shall have quartz halogen bulbs and operate on a 12-volt system. Lights shall be remotely switched from the cab. The complete system shall be weatherproof. Lights shall rotate and elevate with nozzle movement to provide illumination of the water/foam stream or as an independent remote controlled light tower.

139.1.10 Rotation Function:

139.1.10.1 Limited rotation shall be provided for extendible waterway. Rotation shall be a minimum of 30 degrees either side of centerline. Outriggers shall not be allowed to meet this requirement. An "OK To Rotate" light shall indicate when the extendible turret is elevated to a safe point for rotation.

139.1.10.2 The rotation function shall be controlled by the Snozzle joystick utilizing a twisting motion to rotate right or left. A "Boom Center" light shall indicate when the extendible turret is properly centered on the vehicle for bedding.

139.1.11 Piercing Nozzle:

139.1.11.1 An independent auxiliary nozzle with a piercing applicator shall attach to the volume water/foam nozzle to provide remote controlled penetrating capability. A high tensile steel tip shall provide a spray pattern with up to 250 GPM flow. The piercing nozzle shall have the capability to provide a separate water/foam discharge with selector switch on joystick console. The tip shall be removable and provide a 1-1/2 (1.5) inch I.D. hose connection to allow a hand line to be extended from the tip for stand pipe operations.

139.1.12 Color Camera and Recorder:

139.1.12.1 A full color, compact, high resolution, shock resistant, weatherproof camera shall be attached to the nozzle assembly. Camera will move in conjunction with nozzle motion to allow remote controlled positioning. A 10 inch flat screen color monitor shall be provided for the operator's position. Video transmission shall be via cable carried within the upper boom. The camera shall be fitted with a motor zoom control. An appropriate lens remote zoom control switch shall be accessible to the operator.

139.1.12.2 Simultaneous VCR recording capability is required, the VCR unit shall be 1/2" VHS format and have the capability to record in 2-4-6 hour modes. A separate audio input shall be provided to simultaneously record radio conversations. Day, date and time encoding shall also be provided.

139.1.13 Dual Flow Capability:

139.1.13.1 Piping and valving to the extendible turret shall be capable of providing dual flow rates and appropriate foam metering through the volume nozzle.

139.1.14 Infrared Camera:

139.1.14.1 The Forward Looking Infrared (FLIR) camera (item 59,a) shall be attached to the nozzle assembly to provide enhanced visibility for low light or smoky conditions. The FLIR system shall be capable of operation as a driver’s aid during low visibility driving conditions. The FLIR camera shall be connected by a standard video interface to the same video monitor as defined in the color camera section. The single monitor shall be switchable between the camera and FLIR modes of display.

139.1.15 Automatic Nozzle Leveling:

139.1.15.1 The nozzle shall be equipped with an automatic leveling device that will keep the nozzle parallel to the ground regardless of boom position. A separate "On/Off" switch near the nozzle joystick shall allow the operator to select automatic or manual nozzle control.

139.1.15.2 The nozzle shall be equipped with an automatic leveling device that will keep the nozzle parallel to the ground regardless of boom position. A separate "On/Off" switch near the nozzle joystick shall allow the operator to select automatic or manual nozzle control.

140.0 THE FOLLOWING OPTION IS REQUIRED TO BE PRICED (<u>Refer to Section III – Price Schedule</u>):

140.1 The vehicle shall be equipped with a 500 pound dry chemical system meeting the performance requirements of Chapter 3, section 1 of the FAA Advisory Circular.

140.2 The handline for dry chemical shall be a front **<u>or</u>** side mounted hose reel (depending on bumper turret configuration) equipped with 100-foot. of one (1) inch dual agent twinned type booster hose. The hose reel shall be equipped with a 12-Volt DC electric rewind motor with manual rewind provisions and a tension device to prevent the unreeling of the hose. The nozzle shall be a *WILLIAMS* Hydro-Chem capable of discharging 60 GPM foam/water and five (5) pounds per second of dry chemical in accordance with the performance requirements of the A/C. Controls at the handline shall allow charging of the nitrogen into the dry chemical tanks, and charging of the dry chemical into the handline.

140.3 1000 pounds of *WILLIAMS* "Vivid Purple K" dry chemical with charging funnel.

140.4 One (1) complete set of fully charged Nitrogen bottle(s) shall be supplied, to include a spare bottle for re-servicing. The quantity of Nitrogen provided shall be such that it will provide a complete discharge of the dry chemical agent powder plus perform a blow-down operation. Each Nitrogen bottle shall be equipped with an integral pressure gauge on each bottle so crew members can easily determine the state of charge when the cylinders are in storage.

140.5 An electric winch system shall be provided to lift and lower the nitrogen cylinder from the ground level to the stored position to allow operators to perform the nitrogen cylinder re-servicing without the need for any heavy lifting.

140.6 Remote LED bar graph type pressure gauges shall be provided in the cab to indicate system operating pressure and the propellant cylinder pressure.

141.0 THE FOLLOWING OPTION IS REQUIRED TO BE PRICED (<u>Refer to Section III – Price Schedule</u>):

141.1 The vehicle shall be equipped with a 460 pound Halotron I system, meeting the performance requirements of Chapter 3, section 1 of the FAA Advisory Circular.

141.2 Dash mounted controls shall be provided to charge the Halotron system. A means shall be provided that will indicate the capacity of the agent in the storage vessel. The handline for Halotron I shall be 150-foot of one (1) inch type booster hose on a hose reel. The hose reel shall be equipped with a 12-Volt DC electric rewind motor with manual rewind provisions. The nozzle shall discharge five (5) pounds per second of Halotron in accordance with the performance requirements of the A/C.

141.3 **With Snozzle option only.** The discharge of Halotron agent may also be required through the piercing applicator of the optional elevated waterway, if purchased.

141.4 1000 pounds of Halotron I, and a re-servicing kit shall be provided.

141.5 One (1) complete set of fully charged Argon bottles shall be supplied, to include a spare bottle for re-servicing. This quantity of Argon provided shall be such that it will provide a complete discharge of the Halotron agent plus perform a blow-down

operation. Each Argon bottle shall be equipped with an integral pressure gauge on each bottle to allow crew members to easily determine the state of charge when the cylinders are in storage.

141.6 An electric winch shall be provided to lift and lower the Argon cylinder from the ground level to the stored position. The design shall be such that it will allow for operators to perform the Argon cylinder re-servicing without the need for any heavy lifting.

141.7 Remote LED bar graph type pressure gauges shall be provided in the cab to indicate system operating pressure and the propellant cylinder pressure.

142.0 THE FOLLOWING OPTION IS REQUIRED TO BE PRICED (<u>Refer to Section III – Price Schedule</u>):

142.1 Diagnostic Equipment:

142.1.1 To include a laptop computer, hardware and software for engine, transmission, and anti-lock brakes, DVES, and Eagle Eyes.

142.1.2 To include OMEGA CDH 280 KIT conductivity meter kit for the purpose of conducting the required annual foam and flow tests.

OMEGA
One Omega Drive
Box 4047
Stamford, CT 06907-0047
Phone # 203-359-1660

143.0 MISCELLANEOUS:

143.1 Weight Scale Ticket (Shipping Weight): A weight scale ticket is to be included with the MSO (Manufacture's Statement of Origin). Also refer to Section III – Paragraph 9.

143.2 All filters (engine air, engine oil, and hydraulic, etc.) to be easily accessed by maintenance personnel.

143.3 Publications:

143.3.1 To also include complete electrical schematic (as built) drawings.

143.3.2 Also, refer to requirements as per Section III – Special Terms and Conditions.

143.3.2.1 To include one (1) complete set.

143.4 Delivery:

143.4.1 Delivery of the first (1st) unit will be FOB Anchorage International Airport (ANC), 5740 Dehavilland Avenue, Anchorage, Alaska.

143.4.2 Bids with delivery longer than 365 days ARO shall not be considered.

143.4.2.1 Failure to meet the specified 365-day delivery date shall result in liquidation charges assessed for each day the ARFF vehicle is late. Refer to Section III –Special Terms and Conditions.

143.4.3 Delivery to Final Destination:

143.4.3.1 Bonded drive-a-way delivery shall be required in all cases of surface movement of the ARFF vehicle.

143.4.3.2 Surface movement (vehicle being driven) is limited to loading for truck or vessel shipment. Surface movement over the Alaska-Canada (ALCAN) highway is not acceptable.

143.4.3.3 Vessel shipment shall be under deck (*TOTEM OCEAN TRAILER EXPRESS*) to help protect the unit from salt spray.

143.5 Component Manufacturer's Certification:

143.5.1 The vehicle manufacturer shall provide a copy of the component manufacturer's certification (signed application approval) for each of the following ARFF vehicle components, to the Contracting Officer, not later than delivery of the ARFF vehicle to the FOB point:

143.5.1.1 Axles.

143.5.1.2 Complementary Agent Pressure Relief Device.

143.5.1.3 Complementary Agent Storage Container.

143.5.1.4 Engine; Prime Mover and Pump, if separate.

143.5.1.5 Handline Hose(s) with Couplings Attached.

143.5.1.6 Propellant Gas Cylinder(s).

143.5.1.7 Propellant Gas Cylinder Regulating Device(s).

143.5.1.8 Tires.

143.5.1.9 Transfer Case.

143.5.1.10 Transmission.

143.5.1.11 Wheels.

143.5.2 Also refer to Section III - Special Terms and Conditions and to Section V – Bid Price Schedule for other requirements and quantities.

144.0 INSPECTIONS:

144.1 Prior to shipment from the manufacturer's plant, representatives of the State will inspect each **completed unit** for conformance to specifications. Each completed unit, component equipment, and accessories shall be inspected and/or tested by the **bidder or bidder's contractor** for compliance with specifications, **PRIOR** to the arrival of the State inspection team. The State reserves the right to appoint an independent inspector at the State's expense to periodically monitor the progression of the unit during the manufacturing process.

144.1.1 The successful bidder is to provide the State with a minimum 30 days notice prior to the pilot inspection.

144.2 Prior to the arrival of the State inspection team, each **completed unit**, component equipment, and accessories shall be inspected and/or tested by the contractor for compliance with specifications.

144.3 The contractor shall provide full access to the State inspection team.

144.4 These inspections by the State shall be thorough and very critical, and will encompass a complete review of the specifications. Adequate time and technical personnel shall be made available to assist the State in these inspections.

144.5 The bidder (responsible sales rep) shall also be in attendance.

144.6 Inspection trip costs. Bidder will supply round trip coach ("Y") airfare (not supersaver), with open arrival and departure times, for three (3) inspectors to the manufacturer's facility. All inspectors will depart from **ANCHORAGE**.

144.6.1 Per Diem for each of the three (3) inspectors shall be at a rate of US$120.00 per day. It is expected that there will be four (4) days (travel day, two inspection days, and return travel day).

144.6.2 The successful vendor shall assist by booking lodging reservations. Meals and lodging will be paid by the State inspectors.

144.6.3 Arrange and provide all ground transportation necessary to conduct the inspection for the State inspection team.

144.7 While the State recognizes contractual responsibility in testing, the State reserves the exclusive right to reduce the number of inspectors when and if that action seems prudent. If the number of inspectors is reduced, the Contractor will return to the State all monies saved by that action within thirty (30) days following the actual inspection.

144.8 It shall be the responsibility of the State inspection team to technically inspect and test the unit for compliance with the specifications.

144.9 It shall be the responsibility of the Contracting Authority Representative to observe the inspection and test to assure compliance with the published terms, conditions, and specifications of the contract, and to mediate any disputes, which may arise between the contractor and the Department of Transportation's representatives.

144.10 FINAL ACCEPTANCE REMINDER: Final acceptance is at final destination; however, all major tests will be conducted at the contractor's place of business unless the State has reason to believe alterations or damages have taken place which may have changed the performance or design characteristics of the unit since the time of inspection at the contractor's location.

144.11 A final inspection of the unit will be conducted at FOB point to assure that the unit still meets specifications.

144.11.1 Should the State determine that it is necessary to have the representative of the Contracting Authority attend the delivery inspection due to numerous specification discrepancies that were not corrected per the Pilot Inspection Report, or the vendor requests the representative of the Contracting Authority to attend the delivery inspection, the vendor shall pay round trip coach airfare (not supersaver) from Anchorage to the assigned location and per diem at $120.00 per day.

145.0 ALTERATIONS:

145.1 The vendor must obtain approval of the Contracting Officer, in writing, prior to performing any requested alterations, which are not within the scope of the specifications contained herein.

145.2 Any extra charges for alteration, not approved by the Contracting Officer, shall be denied.

END OF SPECIFICATION #195-4500-ANC